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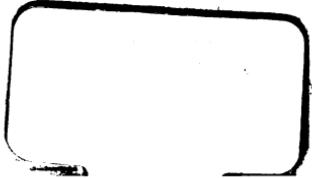
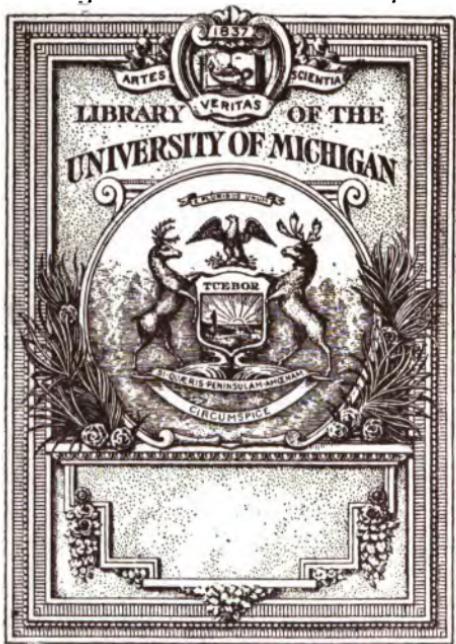
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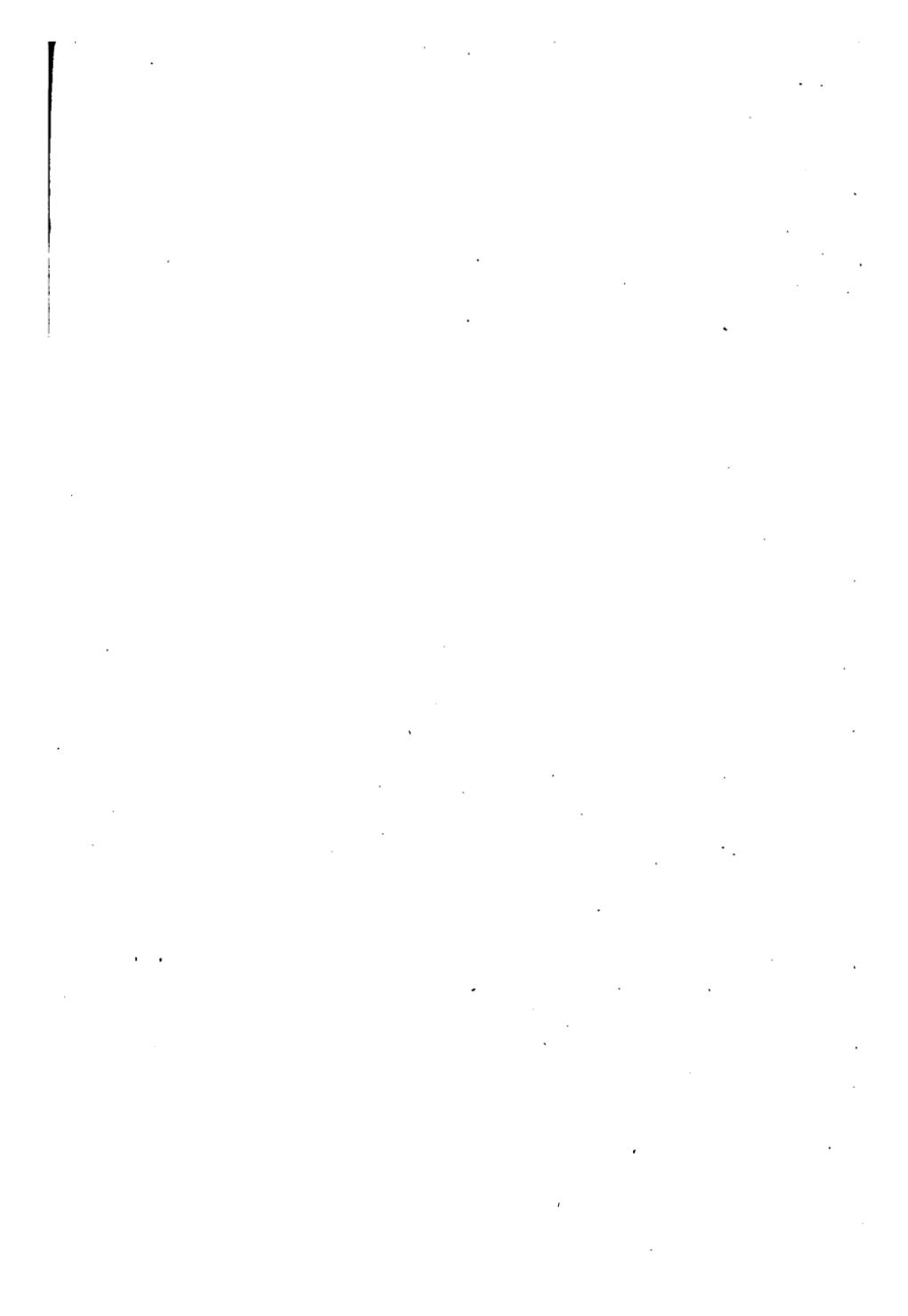
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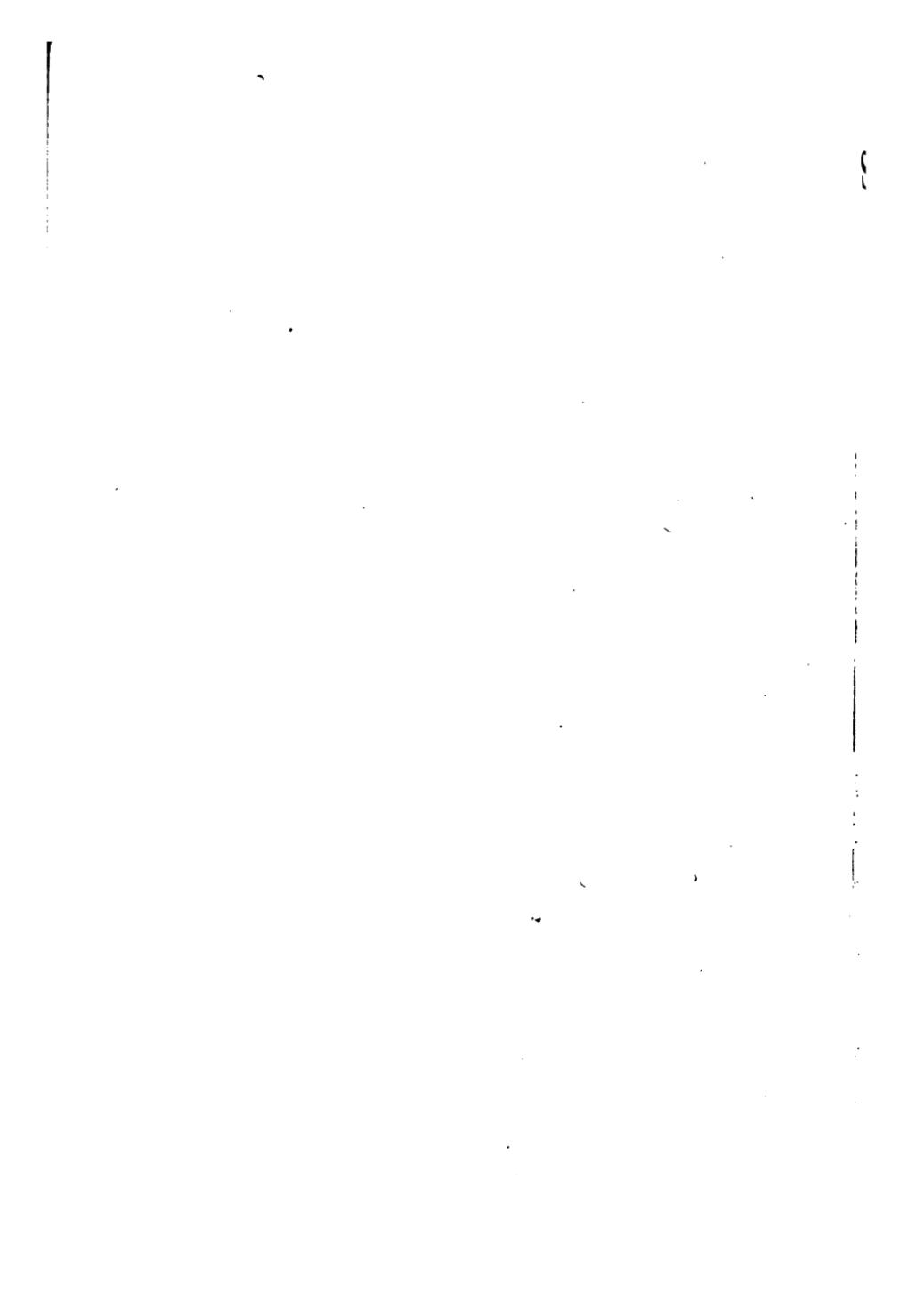
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SOCIAL PRINCIPLES OF EDUCATION

BY

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1913

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TO MY WIFE
THROUGH WHOSE HELP THE
WRITING OF THE FOLLOWING PAGES
WAS MADE POSSIBLE

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PREFACE

EDUCATION is an ever-changing ideal; hence concepts of educational values and methods are in a state of constant reconstruction; and the aim of education must be progressively redefined. The direction of this reconstruction varies from age to age in accordance with the trend of thought. At one time education is valued for its contribution to religion; again, as a means of preparing a favored few for leisure or leadership; and at another time for its results in enlightenment, discipline, or culture in the life of the individual.

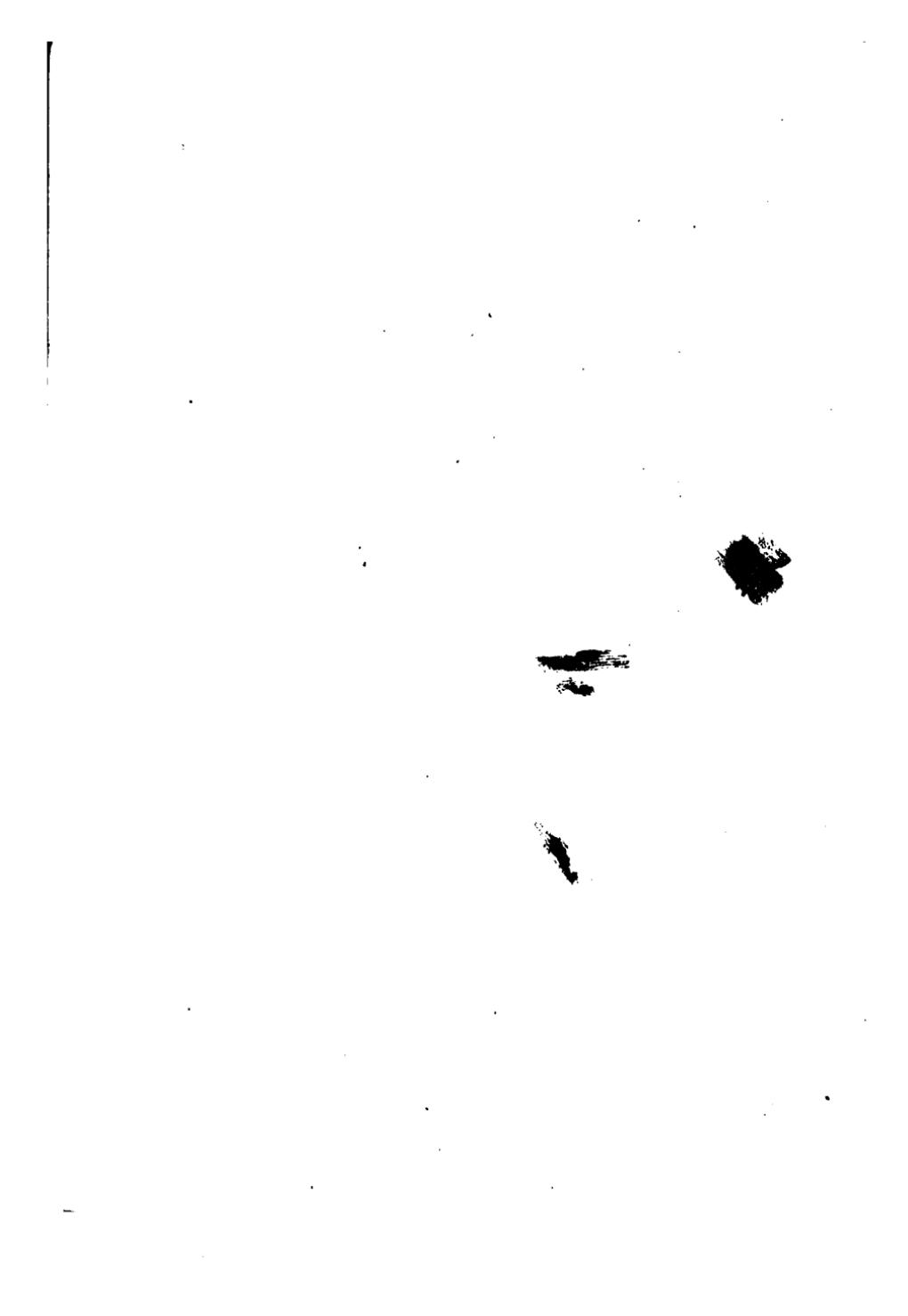
The present demand upon education, though but half defined in social consciousness, is that it shall relate itself immediately to the concrete and vital experience of all as they carry out the activities that constitute their life-process. Such values as *knowledge, culture, power*, no longer satisfy the educational ideal; these must in some way combine to spell *efficiency*. Nor is this efficiency something fanciful or unreal, but rather the power and the will to become an active, helpful contributor to the social welfare of the present. Education is therefore a social function, and educational values are to be measured in terms of *social efficiency*.

It is the purpose of this volume to formulate the social concept of education; to offer some help, however slight, toward bringing the social meaning of education more clearly to consciousness; to make a tentative statement of the social principles underlying the educational aim and process. Much work has been done in recent years in the field of the general principles of education. Differentiation has been working out until we now have a more or less clearly defined set of biological, psychological, and philosophical principles. The social principles of education have been less fully developed. Much good work has been done, but a complete and coherent statement has not yet been accomplished, if indeed such has been attempted. On the other hand, it is doubtful whether the material is yet available for anything like a full or final statement in this field. It will not be expected, therefore, that the present work will aim at completeness or finality.

The plan of the volume is simple. The *individual and society* are conceived as the two fundamental elements in the educational process; hence their relations and the part each plays in the common life-process are discussed. Since all conscious evolution must be guided by purpose, *the aim of education* is next considered. The educational aim is found to originate in and lead back to the social process. This necessitates an analysis of the *social process* to discover what demands the different social activities put upon education. But education

accomplishes its purpose only through changes wrought in the individual. It is necessary, therefore, to consider *the powers and capacities of the individual* which enable him to fit into the social process. Education works upon these powers and capacities in the course of their genetic development; so *the mode of individual development* is considered. The means that education employs in utilizing the powers and capacities of the individual to fit him into the social process, and thereby to accomplish the ideal relations between the individual and society are next to be sought. These are found to consist in *the curriculum and the social organization of the school.*

CORNELL COLLEGE,
MOUNT VERNON, IOWA,
July, 1912.



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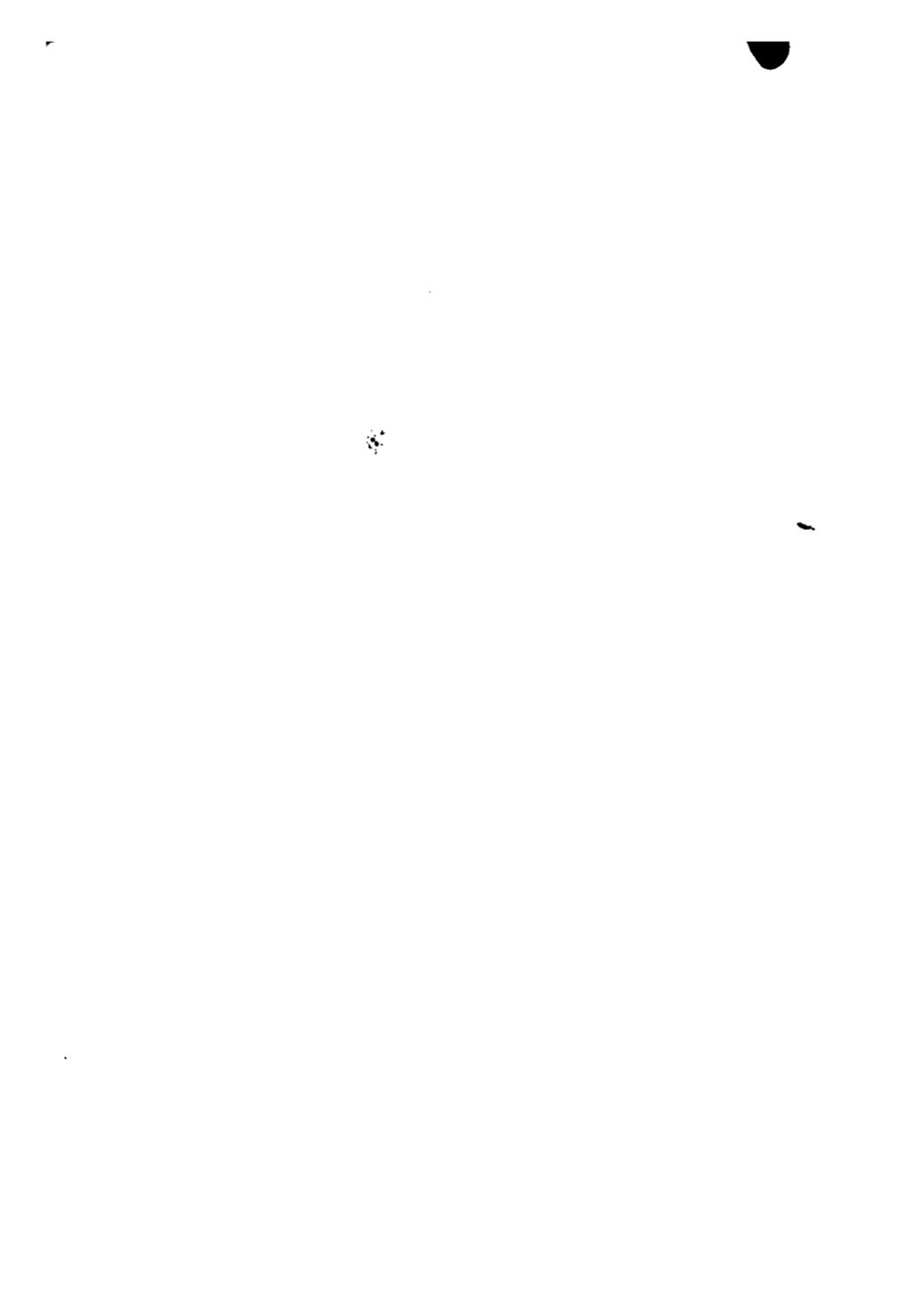
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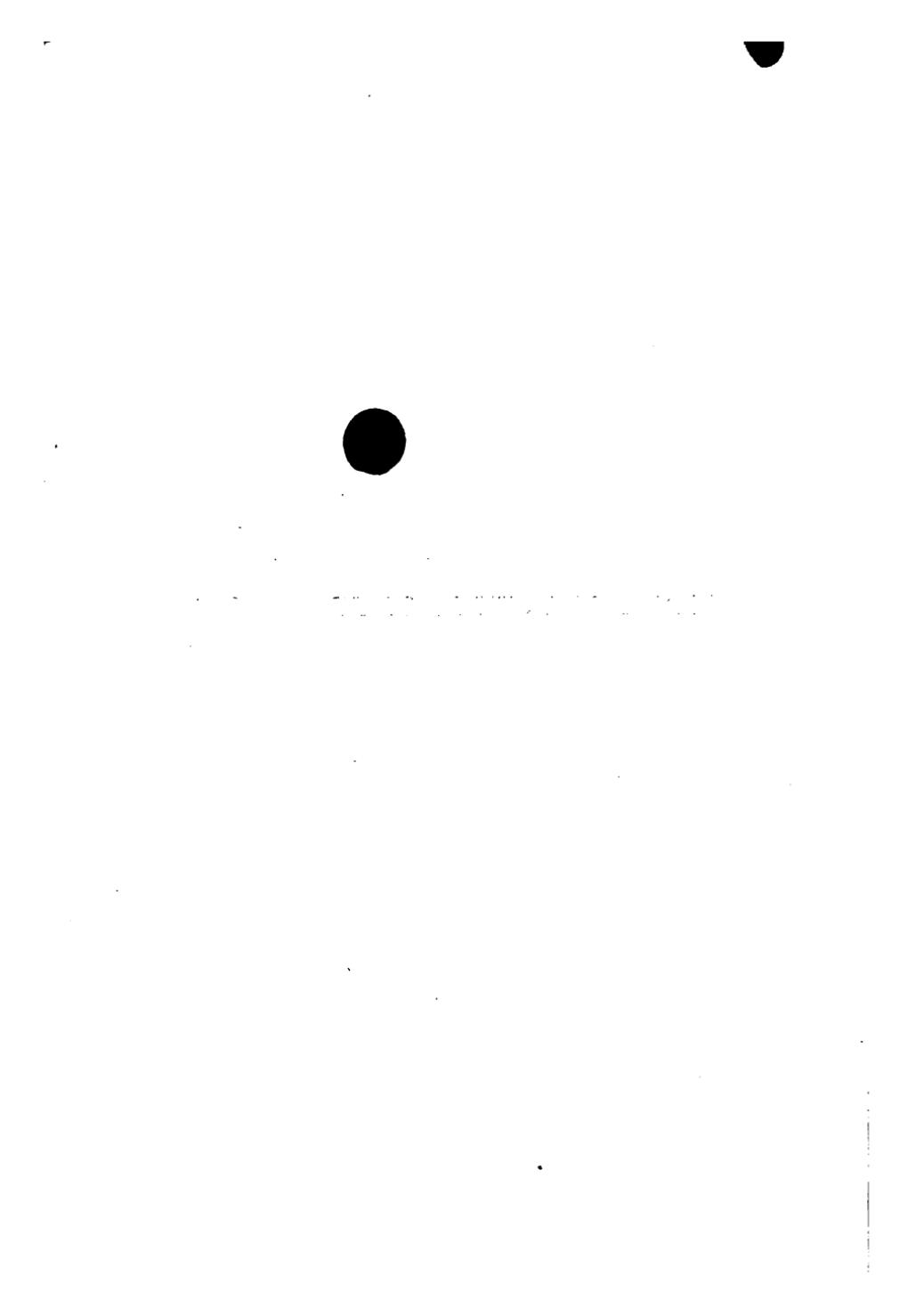
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SOCIAL PRINCIPLES OF EDUCATION



SOCIAL PRINCIPLES OF EDUCATION

CHAPTER I

INTRODUCTION

The problem of philosophy is to bring to light new and more profound meanings. Philosophy seeks to find in the world as a whole a broader and richer significance through discovering the ultimate and vital relations which exist among its parts. It tries so to organize and unify experience that it may possess the richest and fullest reality possible. Philosophy attempts to fit part to part in the great mosaic of creation, confident that the meaning of the whole and of each part will appear when the pattern is complete.

The scope of philosophy is, therefore, as broad as the universe; its limits are set only by the reach of the mind in its search for truth. Hence philosophy must enter every field known to man; nothing is foreign to its interest, and nothing too trivial or too important for its consideration. And when philosophy shall have fulfilled its task, we shall have a special philosophy for each particular field: a philosophy of history, of politics, of religion, of science, of education, and as many other fields as there are divisions of human activity; we shall also have a general philosophy showing the interrelations among these fields,

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and organizing them into one great unity. The method of philosophy is the same in each of the many fields it enters: it seeks to relate the parts of the field to each other, and to relate the special field to the larger whole. Applying this method to education, *the philosophy of education seeks the true meaning of education by defining its elements, and discovering its place in that larger whole which we call the social process.*

The plan of the present work does not include a complete philosophy of education, which would require a discussion of the relations and meaning of education in each of its many aspects, such as the biological, the psychological, the historical, and the social. Our purpose is rather the narrower and more immediate one of discovering and applying the philosophical principles underlying the last of these fields, the social aspect of education. It must be kept in mind, however, that education is primarily a unity in actual experience, and that these different phases do not exist apart. They are separated only for purposes of discussion and emphasis. In the following pages, therefore, constant reference will be made to the biological, the psychological, and the historical factors in education, but always with reference to their bearing upon its social aim and significance.

PART I

EDUCATIONAL ELEMENTS AND AIM

CHAPTER II

THE INDIVIDUAL AND SOCIETY

The fundamental terms with which the social principles of education have to deal are two, the individual and society. It is through the interrelations of the individual and society that the necessity for education arises, and that education is made possible. For if individuals did not constitute an organized society; if each person lived encased in an impenetrable shell of self-sufficiency; if there were no bond uniting all together in one common set of activities and one common destiny; if there were no common ideal toward which all are striving—then there would be no need for education. For the need for education arises at the points where life touches life in social activities, and the subject-matter of education has its origin in the solution of these social problems. Since the problem of education is the problem of the interrelations of the individual and society, it will be well at the outset of our study to consider something of the nature and relations of these factors.

The individual and society the fundamental terms in education.

I. Interrelations of the Individual and Society

**Relationship
between the
individual and
society.**

Various concepts of the relation of the individual and society have obtained at different times. The relative importance of one or the other has been emphasized as the socialistic or the individualistic view has happened to prevail in the thought of the time.

The *individualistic* concept holds that the individual is the ultimate and all-important factor in the relationship.

The "individualistic" concept. His interests are supreme, and his rights are higher than the rights of society. Society is but an "aggregation of individuals," with the emphasis on *individuals*. There is no such thing as common good when it comes into conflict with individual liberty. Such a society lacks a unifying bond or organizing element to hold it together, and hence cannot endure. Historically the individualistic concept has been of great service in emphasizing and establishing the dignity and worth of individual personality. But, carried to its logical outcome, this concept gives us as its sequel a group of victorious and blood-crazed French Revolutionists turning and rending each other when they have triumphed over their foe. It is impossible permanently to base a society on an individualistic concept, for the outcome of such a relationship of the individual and society can only be anarchy and dissolution.

The *socialistic*¹ concept in its most extreme form leads to the view that "man is a mere abstraction, and there is nothing real but humanity." If a conflict should occur

¹The term "socialistic" is here used as the opposite of "individualistic," and with no other meaning.

between the immediate interests of the individual and society, the individual must give way. The individual does

The "socialistic" concept. not count as against the interests of society, and he has no rights which society is bound, just because they are his, to respect. If society demands that the child shall be taken from home at the age of seven years and trained only in the calling of a soldier, the individual has no choice but to submit—and Sparta is the result. If that more powerful part of society living on a higher social plane wills that the weaker who live on a lower social plane shall be made slaves, in order to give wealth and leisure to the higher and more powerful, then the interests and welfare of the enslaved are not to be taken into account.

In its less extreme form, the socialistic concept does not so ruthlessly sacrifice the individual. The interests

A modified form of the socialistic concept. of society still come first, but it is recognized that society can secure its own interests without trampling on those of the individual. In this modified concept, the interests of the individual and society are not wholly common, but they are not as a rule antagonistic. Society begins to consider the individual; he is taking on a value in his own right. He is now educated by society chiefly because the welfare of society demands it, but also in some degree because it is good for the individual. He is punished when he becomes an offender primarily for the protection of society, but also in the hope that it may do the individual himself some good. The interests of the two are not yet felt to be identical. Two distinct and relatively independent orders do exist: the social order which must in all cases prevail, and the individual order which must always give way at the points of conflict.

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No social organization based on this false concept of the relationship of the individual and society can finally succeed. Such an element of strain in their relations must prove fatal to the development of both. While it is true that society must seek to promote the *common* welfare, yet this must include the welfare of every individual. For there is an individuality in all men, high and low, that has its rights, and that must be held sacred by society. The individual has in him the seeds of personal freedom, and must finally come to his own. Universal democracy covering the whole range of social relationships must ultimately prevail, else man is a craven and civilization a failure.

Plato saw clearly the fallacy of both the individualistic and the socialistic concept, and their fallacy has been more fully exposed in the writings of Hobbes, Spencer, and many other philosophers. There *can* be no real conflict between the interests of the individual and the interests of society. When there is seeming conflict it is either because the interests of one or the other are not understood, or else there is failure in adjustment between the two.

The realizing of this truth has led to the development of the *organic* concept of the relation of the individual and society.¹ Plato conceived society as an organism, and individuals as organs or members of the social body. Spencer has carried this biological analogy out in great detail in his social philosophy. The analogy is very attractive, and the concept has been useful in emphasizing the identity of interests between society and the individual, and the community of interests between individuals. With this

The socialistic concept inadequate.

No real conflict between interests of society and the individual.

The "organic" concept.

concept in mind it is easy to understand that if we are members one of another, then one member cannot suffer without the others suffering with it; or, presenting another phase of the same truth, that

“All are needed by each one;
Nothing is fair or good alone.”

Nevertheless, a danger, or at least an inadequacy, lurks in the biological concept of the relations of the individual and society. For in the biological *Danger of pushing the organic analogy too far.* organism the separate organs do not possess the inherent power of activity and self-direction; the organs or members do not develop into *persons*; they respond blindly and without intelligence to stimuli which they cannot control or resist. Society, on the other hand, is constituted of self-conscious and at least partially self-directive individuals, each with a personality striving for development and expression, and each a functional element in a larger functional whole.

Viewed from the dynamic standpoint, society is not a thing, but a process. The social process is made up of the *Society more than the sum of its parts.* life process of all the individuals constituting society—all the thoughts, the feelings, the activities of the participants in the great complex that we call the day's life. But the social process is something more than a mere aggregate of the life-processes of individuals. For the lives of individuals do not run along like so many parallel streams, each untouched by the other. There is a constant interplay of life upon life, a constant interlinking of destiny to destiny, a constant interlocking of force to force until the currents of the great social stream are all woven together

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like a great network of capillaries. And, just as an animal is more than the sum of its organs, because through them it has *life*, so society is more than the sum of its individuals, because out of their interrelations it has spirit, life—*Zeitgeist*.

This *Zeitgeist* is more than an expression of the life or spirit of society; it is in turn an organizing, unifying factor, tending to bind society together and to mould individuals after one common social purpose. For society does not just *happen* to hold together in the working out of a common social life and purpose, any more than the particles of the earth merely happen to stick together instead of flying separately out into space. Each requires an integrating, organizing force suited to the requirements of its own particular realm. The result of this unifying social force is an *organic society*, whose watchwords are unity and progress.

The bond which holds society together in one unitary process is not homogeneous and simple, but is marvelously complex. It has its rise in the multiplicity of interrelations at all the multiple points where life touches life in the social process. The unifying bond comes from within, and not from without; it is implanted in the nature of man, and not forced upon him as an afterthought. It is not, therefore, governments, nor armies, nor such natural barriers as mountains or oceans, that hold society together; but rather an organizing, teleological, subjective principle working in the individual. This principle expresses itself more or less blindly in the earlier stages of social development, and has not even yet risen fully to consciousness in man.

Various attempts have been made to discover the nature of this social bond, and to formulate it under one comprehensive term. Some have conceived **Nature of the social bond.** *force* as the great unifying principle; people are held together only because of the strong hand of those in power over them. Others have said that it is *economic necessity*; man cannot successfully cope with the forces of nature and secure for himself a living from the earth except in co-operation with other men. Others look upon *religion* as the tie that binds all together; the thought of an overruling providence and our common dependence and common destiny weld us into a unity. Others say that *thought* is the great bond; we are held together by the fact that we conceive our world in its meanings and realities, and our relations to them in the same light. Others have made very plausible the claims of *like-mindedness* as the unifying element; it is the fact that we are alike, the fellow feeling that comes from being "members one of another," that holds us together. Still others advocate the thought of a *common good* as the welding force; there is a common element somewhere in the nature of men, a common "good" conceived by each as the coveted goal toward which all are striving, and man has in him enough of divinity to impel him to service and sacrifice for others, that all together may attain the goal.

To which of these views shall we hold? Is it true that there is one great integrating force in society which is so much stronger than *all* other unifying forces that it can be selected from among the others as the most fundamental? Is there **The social bond a complex.** a keystone to the social structure which, if withdrawn, will cause the whole to tumble? We shall probably be

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nearer the truth if we say that *all* the forces mentioned, and many others besides, are fundamental to social unity. The social process is so complex, and life touches life at so many points, that no single bond could tie millions of individual life processes up into one great coherent social stream; it must rather be a network of forces, each exerting its influence upon the individuals to whom this force most appeals.

For not all individuals are equally influenced by social forces. What may serve to draw one into the social pro-

**Nature of the
social bond
varies for
individuals and
peoples.** cess as a contributor to the general welfare may leave another untouched. Beyond doubt there are individuals whose hand would be against society were it not for the fear of *force*. There are others who co-

operate chiefly from economic necessity. Others are appealed to by religion; others by the feeling of like-mindedness; and still others by the ideal of a common good. Not only does this truth hold for individuals, but for societies as well. Indeed, it is probable that each of the forces mentioned has been the chief force in turn at different stages of social development; and all are in some degree operative in any organized society. Without attempting to arrange these forces in a hierarchy, it is evident to all who accept the spiritual as the highest form of evolution in man, that force and economic necessity belong to a lower stage of social development than like-mindedness and the ideal of a common good. The social bond is itself a product of social evolution, and hence of necessity keeps pace with the progress of society.

II. The Contribution of Society to the Individual

The individual and society are but the two aspects of one great unitary fact. This fact is *life*; and life is not a thing, but a process. The life-process may be viewed from either one of its two aspects, the *individual* or the *social*. The millions of individual life-processes unite, intermingle, and play upon each other to produce the social process; the social process includes, moulds, and gives significance to the life-process of the individual. While there is, therefore, but the one great central fact of life, sweeping on in its endless generations, these two aspects do exist, and the life-process can best be described in certain of its aspects from the individual standpoint, and in others from the social. Let us now proceed to consider some of the social influences most important in shaping the life of the individual. What are the chief contributions of society to the individual?

Society supplies the medium in which the individual develops. The old problem of the priority of the hen or the egg has had for its philosophical descendant the question of the primacy of society or the individual. But, fortunately for our present study, we do not need to solve this insoluble riddle. For it will be granted that organized society, with its specialized activities, its multiplicity of institutions, its traditions and standards, does not exist prior to individual activity, but is rather the product of it. But, on the other hand, for any particular individual, society exists first. For the individual at birth finds himself in a society already or-

Society (x) a medium in which the individual develops.

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ganized and carrying on its multiform activities. The very family of which he is a member is social rather than biological in its origin and nature. Social conventions surround his birth, give him his name, dictate his dress, determine how he shall eat, select the language he shall speak, and specify the nature of his education. He conforms to social standards set up before he was born, shapes his views in accordance with a religious creed he did not make, chooses among political principles already formulated, and selects a vocation from among many organized lines of activity. He follows the social customs in wooing his mate, is married by whatever form of ceremony society dictates, and is finally buried in accordance with social traditions. In fact, he does as other people do because that is the natural way and the best way to do. Society touches his life at every point, prodding him to activity here, restraining him there, providing him with opportunity, and loading him with responsibility, rewarding him, punishing him, and supplying him with a whole system of checks and balances. The individual could no more live his life outside the medium of society than he could outside the medium of air.

Society stimulates the individual to activity. The motive power which drives to activity and worthy achievement exists within the individual, but the clutch is thrown on by social forces. Men must be paced if they are to reach the limit of their powers. None would come to their best, and few even to mediocre, achievement were it not for the pressure of necessity.

One of the most immediate and pressing forms of necessity is the economic, the necessity of securing food,

shelter, and clothing. The great part that this form of necessity has played in man's progress may be seen from

The pressure of necessity required. the peoples who have been left hopelessly behind in social evolution because of the absence of its pressure.

The peoples of the tropics are inferior to those of the temperate zones probably far less from a difference in original powers and capacities than because nature has been so generous in food and climatic conditions in the tropics that the powers and capacities of the individual have not been demanded in the struggle for existence, and hence have lain dormant. Economic necessity does not, however, go far enough as an incentive. It serves to lift man above savagery, but, unaided by other motives, would leave him stranded near the level of barbarism.

It is at this point that social incentives begin to exert their pressure. Man comes to discover that the life

Necessity for social stimulus. is more than meat and the body more than raiment. Working, striving, suffering shoulder to shoulder with other men, man's social consciousness has its birth. He not only must have enough to eat and wear, and a shelter to keep him warm, but he must have standing in the eyes of his brother man. He covets the approval of public opinion; he is eager for the honors and rewards which society stands ready to bestow upon him; he seeks to make a name for himself which will endure in the social memory. Or, again, he may feel the call of a great social need and achieve his own greatness through self-sacrifice and service. Man reaches his best only through striving to minister to his fellow man's greatest need, or through striving to make himself worthy the rewards which his fellow man gives him in return for his service. Separated from

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the stress of social activities the individual would never "find himself." His powers would remain dormant within him from lack of a motive to use them. The richer and more diversified, therefore, the social activities and relationships which the individual finds pressing upon him, the greater is the stimulation of his own powers, and hence the fuller their development.

Examples of the power of these social incentives are seen in men's thirst for power, which is valued, after all, chiefly because it focuses public attention ^{Influence of social incentives.} and esteem on its possessor. Men will fight, sacrifice, die, for power. This is not for the love of power in itself, but because society has stamped a high value on power through giving honor and rewards to those who achieve it. Men, therefore, take society's appraisement of the worth of power, and, under the stimulus of this social incentive, achieve results both for themselves and society which would have been impossible without the help of such a social stimulus.

The individual is also constantly under the pressure of social necessity as regards his standard of living. The standards set up by those of the social plane ^{Standards of social prestige.} upon which one lives are practically binding upon him. To maintain his position and prestige he must come up to the required level no matter what the cost. For this reason standards of living, except for those of the lowest social planes, often have very little relation to the actual requirements of comfort and well-being. People come to care far less whether their clothes are comfortable, their houses homelike and convenient, and their food nutritious and healthful, than whether in these things they

are maintaining as high a standard as other people of the same social plane. So strong is the social stimulus in this direction that an artificial emulation is set up which often provokes overstrain and financial worry, and always results in economic waste.

After the most immediate bodily wants have been supplied, it is, therefore, the activities and achievements of others that constitute our strongest incentive to effort. The individual feels that he must catch step with his generation.

Social emulation leads to effort. The mere example of progress and success is a constant spur to personal endeavor. We strive to increase our wealth not more because we need the money than because we note that our neighbor's fortune is growing. We go to school not alone because we aspire to an education, but also because we see others securing an education, and we feel that we must not be left behind. New books are written, new scientific discoveries made, and new inventions worked out not solely because of the creative impulse stirring within us, but partly because other scholars and inventors are doing these things, and we must keep up. Our churches are built and our philanthropies supported not wholly from love of our brother man, but partly because it is in the spirit of the age to do these things, and individuals, therefore, respond with their help. In these and many other activities the individual is caught in the onward sweep of social progress, and he has no choice but to exert his powers to the utmost if he would not be left hopelessly behind in the race. It is only under the pressure of such social necessity that man reaches the limit of his powers.

The individual owes a great debt to society for providing him with a set of organized activities. Without

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this help he would be like primitive man, who, perforce, felt his way blunderingly, groping for the best ways to

Society provides (3) a set of organized activities.

expend his energies so as to secure from them the greatest returns. But no one had blazed the way; activities were as yet

unorganized, and early man was obliged to learn in the hard school of experience how and what to do or not do. He was an explorer in a strange land, without chart or compass. No wonder he often made mistakes and lost his way.

The individual who, at birth, enters a well-organized society, with its various modes of activity thoroughly

The advantage of the individual of to-day. formulated, has an incalculable advantage over his brother man of an earlier social era; for a large part of the experimenting has been done. The crudest of our blunders and the most costly of our mistakes have been made; they have taught their lesson, and will not again be repeated. The various fields of human activity have been thoroughly explored and charted, and signs of "danger" or "clear track" set up here and there. We have given a fair trial to feudalism and slavery, and have discarded them as failures; we have given up burning witches and those who do not agree with us in theology; justice is no longer determined through a trial of the accused by "ordeal"; and we are even losing our faith in war as a method of settling disputes.

Primitive man, lacking organized activities, was obliged to supply all his needs through his own industries; but

Social origin of organized activities.

he found that it did not work well, and society has organized a complex system of industries based on the principle of division of labor; and the various well-defined vocations are

the result. Bartering for the exchange of commodities was found to be an unsatisfactory method, hence money was invented and great commercial systems built up. After much experimentation it was found that the monogamous family is the type of relationship between the sexes best suited to individual and social development. Man's religious impulse failed to find satisfactory expression and development except in connection with other lives moved by similar impulses; and the institution which we call the church came into existence. In a similar way we came by the state, the school, and all the other social institutions which the individual finds ready at hand and inviting his participation.

It is true that all organized modes of activity are constantly changing in progressive societies; yet, such as
The individual adopts social usages. they are at any given time, they represent the aggregate wisdom of society as to the best and most fruitful way for the individual to set about his life activities in these various lines. Equipped with the instinct of imitation, and possessing the power to receive and act upon social suggestion, the individual may reap the advantage of all the experience of his race without even taking the trouble to learn it through history or tradition. All he needs to do is to take up his life activities as he finds them ready for him in the greater social process of which his life forms a part. It is in this way that social progress is made possible and that man is able to climb toward a goal that is constantly mounting upward. Each generation can use the achievements of all former generations as stepping stones; each individual is endowed with all the best methods man has discovered for using his energies and his opportunities.

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Society supplies the individual with criteria of conduct. The individual is by nature neither moral nor immoral; he is simply unmoral. It is only in the midst of social activities that opportunities for decision and choice arise which enable the individual to develop into a moral being. The first acts of the child are wholly individualistic, having their origin and their end both in the self. Though such acts are stimulated by the social environment, the social motive plays no part in their performance. But, little by little, through social activities there comes about a kind of "natural selection" among the impulses and tendencies of the individual. Certain acts are "fit" socially, and hence society rewards them with its approval, and they become fixed as habits in the individual. Other acts do not coincide with social standards and traditions, and hence are frowned upon by society; these the individual has a tendency to drop out, and they do not come to function as habit. The persistence of some acts as a part of a system of conduct, and the failure of others to survive, are thus largely determined by their adaptability to fit into the social purpose. By this means social life supplies the individual with a whole set of checks and balances by which to judge his impulses and achievements. In a complex society there is no limit to the criteria for judgment and discrimination supplied the individual by social attitudes and conditions.

Nor does this mean that the individual is to be merely a puppet in the hands of society, taking his cue for con-

The individual element in conduct. duct wholly from social standards and demands, and possessing no independence of judgment and initiative on his own account.

On the contrary, the first condition for the development

of moral power is freedom for reflective thought and personal initiative on the part of the individual. He must be free to criticise social standards, and to propose and seek to put into practice for himself and others better ones. But even so, this can best be accomplished by building on the moral achievements already accomplished by society. The moral order of all progressive societies is far above that of the individual were he left to develop according to the bent of his own individualistic tendencies without the influence of the social moral order bearing upon him. In all the years of their striving, men have learned some moral lessons so thoroughly that they have become a part of the social fibre. They have come to see, however dimly, that the ideal of a common good is fundamental both to individual development and to social progress. They have learned to check certain tendencies and to encourage others. They have put the social taboo upon some practices and the stamp of social approval upon others. Out of the collective lessons of social experience have come some moral sanctions that are no longer open to question. These society puts at the disposal of the individual. These the individual, through imitation, makes the basis of his personal moral programme. In this way he is saved the necessity of discovering for himself what society has been ages in finding out, and is thus able in the moral order, as in the intellectual or the industrial order, to begin where the race has left off.

Social and
individual
morality.

A distinction may, therefore, be made between social morality and individual morality. In so far as the individual accepts uncritically, through imitation and suggestion, the moral standards and practices of society, they are not for him

moral at all, since they involve no choice on his part. Just as soon, however, as he subjects the moral standards of society to critical examination, and accepts or rejects these standards with reference to his own conduct, he is developing a personal morality. When the individual conceives the necessity for modifying the moral standards of society, and adopts new standards for himself and secures their adoption by society, he is instituting moral reform, which is but another name for social reform. If the new moral standards adopted are better than the old ones which they displaced, the result has been progress both for the individual and society. Both individual moral power and social morality are achieved by a reconstruction of the existent moral order of society through reflective thought and judgment of individuals. That is to say, progressive morality is the result of social evolution, and not of creative fiat. The moral principle exists in the nature of the individual, but it is brought to consciousness and development only through social participation.

III. The Contribution of the Individual to Society

But while society makes so great a contribution to the individual, this does not mean that society is always the contributor and the individual always the recipient. In the first place, this would be fundamentally impossible. For society, in its constituent elements, consists only of individuals, and hence has nothing to give which does not originate in the individual. The law of compensatory action works as relentlessly in the social realm as in the mechanical. It is not "earth" alone that "gets its price for what

The individual must pay his debt to society.

earth gives us." Society, in the end, receives its full return for what it expends on the individual. This must of necessity be the case, else society would soon be a bankrupt in culture, and civilization would wane and decay.

Further, the individual who seeks his own fullest development as a personality has no choice but to repay

Individual development demands social return. his debt to society; for the interests and activities of the individual and society are so indissolubly linked together that the individual can successfully use the gifts which

society so freely bestows upon him only as he employs them as a contributor to social welfare. He can fully realize upon his own powers and capacities only as a participant in the social activities of his day. He can attain to the highest good as an individual only as he seeks the highest good of all. He reaches his own largest success and richest personal development only through service to others.

Thus, through the working of an inevitable law, the individual, in the very process of his own self-realization,

Society receives interest on its investment. must fully liquidate his obligation to society. More than this, society receives, on

the whole, good interest on its investment; for it is out of this interest, compounded through the generations, that social progress is made possible. Each generation, before it passes from the stage of action, adds its modicum to the sum total of human attainment, leaving society so much the richer for its contribution. Failing in this, the individuals have not only failed to repay their debt to society, but have also of necessity failed in self-realization.

We will now note a few of the different phases of the individual's contribution to society.

The nature of the individual makes society possible. Society is more than an aggregate of some millions or billions of individuals scattered, so many to the square mile, over the surface of the earth. It is, in addition to this mere physical existence, an interrelated and co-operative system of activities; it is a unity of spirit and purpose; it is a community of effort and achievement. Each of the individuals constituting society has his own separate and distinctive personality, standing apart on the spiritual side from all other personalities and known to them only indirectly by means of physical forms of expression. Yet, in spite of this inevitable aloofness, there exists that in the nature of man which inevitably demands touch with fellow man. The individual cannot live as an individual alone; he must also be a *socius*.

Whatever, therefore, may be the ultimate nature of the bond which holds men together in societies, we must concede that this bond inheres in the very nature of the individual; it has its roots in the deepest impulses and tendencies of man; it is a subjective demand of human nature, and not an invention of society thrust on from without.

The same truth holds with reference to social achievement. All that has become or will become explicit in the life of society must first be implicit in the nature of man. All that becomes actualized through social endeavor must first be idealized in the minds of individuals. The social institutions, the vocations and avocations, the moral standards and ethical ideals, all existed in the individual before they existed in society, just as the oak exists in the acorn before it exists in the forest.

Society is in a very vital sense only "the individual writ large." The social process is not only made up of the confluent life-processes of individuals, but the nature of these determines the type and character of the social process. The social level is to be found by striking the average of all the individuals constituting society. The social stream cannot rise higher than its source.

The individual is the bearer of social culture. During the centuries of its striving, the race has accumulated an immense store of culture, and this has become the common possession of society. Languages have grown up and literatures of surpassing richness developed. Scientific discoveries and inventions have given men a large degree of control over the forces which come in contact with their lives. Institutions have arisen and become the repositories of collective human experience. Vocations have been developed and specialized until they possess a marvellous degree of effectiveness and skill. Religion has formulated the best in man's concept of God and our relation to Him. These are the things that constitute the wealth of society on the spiritual side. They are the contribution of the past to the present, the social heritage of the ages. In them society cherishes the results of the toil, the sacrifice, and the achievement of the generations.

But these social riches can belong to but one generation at a time. Each generation must receive them anew from the generation that precedes it; or, rather, each generation must *achieve* the social heritage for itself. The spiritual possessions of the race must be created anew in the lives of each successive generation, else the heritage

**Society defined
by the char-
acter of the
individual.**

**The individual
(a) transmits
social culture.**

**Culture must
be created
anew in each
generation.**

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itself is lost; for this spiritual culture is not something that can be stored away in vaults and saved for a later time; it cannot be deposited in books or incorporated in machines or edifices and be drawn upon a century or two hence. Being spiritual, racial culture lives only as it is constantly rebuilt into the lives of men. A few centuries of dark ages and incalculable stores of human treasure are irreparably lost.

The vital part played by the individual in the transference of culture from generation to generation is easily seen in a simple illustration. Suppose all the individuals of a given generation should refuse to be the bearers of the race's culture. Let them close their minds to all learning and education; let them spurn all our literature, art, and science; let them refuse all our institutions and decline to participate in them as members; let them turn from all our organized vocations and reject all our religions and systems of ethics. Where, then, would be all our boasted culture? What would become of all our rich social heritage? We might still for a time have our libraries full of books, but none could read them, and their contents would be lost; we might for a time keep some of our marvellous machines and our scientific formulæ, but none could use or understand them, and they would disappear; our stately buildings, our railways and ships would remain for a time, but they would soon crumble away; our art and our music would fail to be understood, and would be lost and forgotten. All these things would possess no meaning for benighted humanity, and hence could have no value. They would, therefore, soon pass into tradition, and from tradition into oblivion. Society would fall apart, and man be reduced to a condition of

Culture inheres
in life, not in
objects or
symbols.

savagery. Humanity would have to start again at the very foot of the ladder of progress and once more climb with infinite toil and sacrifice toward the goal. So great is the part the individual must play in the progress of society.

Each generation has, therefore, a double duty before it. First, it must take the heritage of culture bequeathed to it by the race and make it secure by incorporating it into their own lives, not failing to add something to it that more may be passed on than was received. Second, each generation must effect a safe transfer of its culture to its successors; that is, *must educate its children*. Having failed in either of these things, it is recreant to its trust. Having achieved them both, it has made its contribution to human progress, and from the standpoint of society has performed its full duty. Its individuals are now ready, in the economy of nature, to pass on from the stage of action that room may be left for the new-comers who are waiting their turn. The field must be cleared for other workers who are impatient to take up their task. Death is as necessary to progress as life.

Individual initiative makes social progress possible. Society is conservative, the individual alone is progressive. Society falls into the rut of custom and tradition and tends to stagnation; the individual possesses initiative and originality which impel to experiment and new lines of activity. The societies in which individual initiative has been suppressed or undeveloped have always been societies of mediocre or inferior achievement.

The individual
(3) makes
progress pos-
sible.

Industrial society, fettered by age-long adherence to wasteful and inefficient methods of production, is emancipated from economic bondage and given wealth and leisure by the inventive genius

Society conservative; the individual progressive. of a Stevenson, a Watt, or an Edison. A

Luther Burbank teaches his generation, long accustomed to routine methods of plant culture, how to double the efficiency of the soil. Bessemer, studying the processes of smelting ore, gives us the improved grade of steel which triples and quadruples the efficiency of our machines and revolutionizes our industries. And so on through an almost endless list of the contributions of scientists and inventors and organizers of industrial activities, who have multiplied the material resources of society almost beyond comprehension through their own initiative and originality.

And the illustrations might be carried over into every field or phase of social activity. Individuals have made

The function of the leader. discoveries in science and medicine which are saving the lives of millions each year,

who otherwise would die an unnecessary and premature death. Moral and religious leaders are pointing us to a better conception of the meaning of life and destiny. Wise teachers are showing us how to save the great waste in time and effort in securing our education. Prophets of commercial and political ethics are arousing the social conscience against public or private graft. Leaders everywhere, standing out above the common level of society, are showing us the way to higher social achievement or urging us to quicken our pace.

Nor are we to think that only the individuals whose names are known to fame possess initiative and origi-

nality. Every man who sees a better way of doing a thing, however insignificant and humble the thing may be, is in his measure a contributor to social progress and a benefactor of his race.

Originality not an attribute of genius alone. Every man who is not a mere follower,

but, while he follows, occasionally leads in his own sphere of activity, is an inventor and leaves his impress upon society.

Society is, therefore, rich finally in its individual members and the ideas which they possess. The world has

Possibilities of achievement ahead. far greater material resources and natural powers than we have yet dreamed of. Each

new discovery and invention only serves to give us an inkling of what is yet to be if we but continue to invent and discover. The social world has larger possibilities of mutual helpfulness and service for the common good than we have yet put into practice. Human powers and capacities possess far greater resources than we have yet succeeded in developing from them. Man's concept of God is susceptible of incalculable enrichment. What we need is individuals of originality and power to stir up their generation to thought and action. What we need is *all* to be men of thought and power, fully developed personalities, finding our own highest good in contributing our part to the good of all.

Briefly summing up our discussion, we have seen that the individual and society are indissolubly linked* to-

Summary. gether as the two factors in one unitary process.

The interests, the success, the defects of the one are the interests, success, and defects of the other. But, while this is the case, yet each has its own particular function to perform in the common process.

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Society must give the individual his chance; his opportunities are to be made the most favorable possible;

Obligations of society. the social matrix must be a soil favorable to individual growth and development.

The social atmosphere must be free from impurities, and must contain the elements that will stimulate to individual effort and achievement. The social organization must rest on the ideal of the common good, and equal opportunity. The social standards must require and reward moral conduct, while still leaving room for individual judgment and independence. Above all, society must not fail in efficiently transmitting its social heritage to the individual, but efficiently perform the greatest of all its functions, *that of educating its youth*. For failure at this point means inefficiency for the individual, and stagnation and decay for society.

On the other hand, the individual man has a responsibility no less heavy. He is the legatee of a thousand generations who have toiled and sacrificed to

Obligations of the individual. accumulate the splendid heritage placed in his hands. He owes a great debt to society

which he can repay only as he first pays the debt he owes to himself—that of making the most of his own powers and capacities. And this self-development is to be accomplished not selfishly for himself alone, but also for society in return for its gift to him. He must realize the social aim, through attaining to the highest possible degree of self-realization. He must respond to society's effort to make him the bearer of the race's achievements —*he must respond to the attempt to educate him.*

REFERENCES

Aristotle, *Ethics* and *Politics*; Baldwin, *Social and Ethical Interpretations*, ch. IX; Bosanquet, *Philosophical Theory of the State*, ch. VIII; Cooley, *Human Nature and the Social Order*; Dewey and Tufts, *Ethics*; Giddings, *Principles of Sociology*, Book II; Horne, *Philosophy of Education*, chs. IV, V; Kidd, *Social Evolution*, ch. II; MacVannell, *Philosophy of Education*, ch. VI; Sumner, *Folkways*, ch. V; Ward, *Pure Sociology*, ch. XII; Wells, *Mankind in the Making*, ch. VII.

CHAPTER III

AIM IN EDUCATION: ITS ORIGIN AND FUNCTION

We saw in the last chapter something of the nature and relations of the individual and society, the two ultimate factors concerned in the educational process. It will be our next problem to study the part played by *aim* in education; for the only basis from which any process can be judged as to its effectiveness is whether it is fulfilling its aim. What, then, is the nature of aim? Where does the educational aim originate? What is its function? What is the aim of education? How shall education successfully effect the articulation of the individual with society? These are some of the questions that enter into our problem.

The questions involved in aim.

I. The General Nature of Aim

Ours is a world of change. Nothing absolutely *is*, but all is forever *becoming*. All things are passing over from what was, through the medium of what is to what will be. One who pauses to contemplate the endless change going on about him, the countless generations of life which ebb and flow, the rise and fall of nations, the ceaseless transformations of energy into its various forms, the growth and decay of worlds, is ready to agree with Heraclitus that all is change. Yet, change is not all; for change is blind, and may as readily lead backward as forward. And the world moves forward.

Change is universal.

Change offers the sole opportunity for progress, whether in molecules, men, or worlds; for nothing static

Progress depends on change. progresses. But change alone is not progress. Only when change is directed by some teleological principle moving toward a higher aim does it become progress. Change which has become progress we call evolution, which is but movement upward directed by an organizing or teleological principle.

Nature of change in different realms. Our problem does not call for a discussion of the nature of this teleological principle. Call it God, or Law, or Natural Selection, or what you will; it is at work in the world, making it intelligible by binding all together in one organic unity, whose watchword is progress. This organizing principle is all inclusive in its grasp. Yet it manifests itself differently in different spheres of being. In the realms of mechanism, chemism, and organism it acts as a kind of *vis a tergo* impelling resistlessly onward; or it is at best an inherent blind impulse which somehow moves in the right direction, but always without conscious foresight on the part of the thing moved. The force of gravitation, chemical affinities, the metabolic processes of organic life, all work in accordance with law, but without knowledge of it.

Man consciously directs change. In man the directive principle has risen to the level of consciousness. Man acts not only in accordance with law, but in full knowledge of it. Here the impulse is no longer blind, but is directed by foresight toward the accomplishment of a conscious end. Evolution has become intelligent; the teleological principle works from within instead of from without. It is only man that can formulate an aim and

select the means for its realization. Nor is this possible in equal degree to all men. Primitive men have very little of such power. They still stand close to the realm whose course is moulded by circumstances. The directive principle has not risen in them to full consciousness; hence they lack prevision of end, and strive blindly, dependent upon a teleology operating upon them from without.

The power to apprehend an aim which shall result in progress is a true measure of the stage reached in evolution.

Man's search for an aim. In Socrates the struggle to conceive an end for existence was waged in tragic earnestness, but without more than a glimmer of the inner light. He battled valiantly for a vision of the truth, but finally drank his cup of hemlock in semi-darkness. Plato climbed a step higher. With his clearer conceptions of the ends of being and man's place in the world, he emerged from the semi-darkness into a clearer light. But it remained for Aristotle to conceive, more clearly than had yet been done by man, the true aims of life and the means for their attainment. How far modern man has advanced beyond the stage occupied by Plato and Aristotle is to be measured by his ability to conceive a better aim than they and to select better means for its attainment.

How far has modern man advanced? From Aristotle to Darwin and Spencer is a long step upward. Yet, with all man's progress, he has in large measure belied his infinite capacities and proved recreant to his high origin and destiny. For much of the change which is going on within man and around him is yet *mere* change and not progress. Man yet conceives his end but dimly. The passing years,

Aim only dimly conceived.

the changes from youth to age, from impotence to power, from poverty to wealth, from ignorance to knowledge, too often fail to advance him toward a higher goal. Life is by too many measured in terms of its length instead of in terms of breadth and depth, and in terms of the amount of material substance it has amassed, gold and houses and lands, instead of in terms of happiness, self-development, and service.

Man's problem is so to apprehend the world and himself that the waste of life—the waste of energy, of time, and Better aim to save waste in life. of opportunity—shall be less. The plastic and changing body, the equally plastic and changing mind which must be developed as it changes or loses its opportunity, the ever-changing environment of society and nature—shall these be so controlled with reference to a clearly conceived and intelligent end that the inevitable change shall spell progress? It remains with man himself, who is gradually mastering the teleological principle within his own realm, to say.

Man has already through his own efforts brought about an age of science, and thereby put himself into possession of a marvellous instrument of control for the attainment of any aim he may conceive for himself. Through science he has devised means of production and distribution which have so increased the world's wealth that there is enough to provide all with abundance. He has invented machinery which does his work and gives him time for leisure. He has developed scientific knowledge which gives him power to eradicate most of the world's physical suffering and disease. He has worked out a psychology which enables him to train and utilize his powers with a

Man's great achievements imperfectly used.

minimum of loss and waste. Man has enough and knows enough to be living on an almost infinitely higher plane than he now occupies. Who of us lives as well as he knows how to live? What society measures up to its concept of physical, mental, or social law? In spite of the world's large aggregate of material wealth, probably one-third of its people go to bed hungry each night; in spite of modern machinery a large proportion of men are forced to endure a crushing, grinding toil which leaves no opportunity for leisure and development; in spite of our scientific knowledge we allow preventable diseases to claim their millions every year; and in spite of our knowledge of a scientific pedagogy we undoubtedly cause the child to waste half of the time he spends in school.

It is no longer a question of knowledge with man, but a question of *values*, a matter of aim. Man needs better to conceive himself. What things are most worth while? What does it best pay the individual and society to strive for? Is it true that the life is more than meat and the body than raiment? Is happiness worth more than wealth? Are richly developed powers of more value than indulgence and ease, and is serving others a higher ideal than compelling service? The answer to these questions will depend on man's clearness of vision in apprehending his aim; and the answer will also determine the distance man has progressed in his evolution toward that higher ideal which is the end of his striving.

Better aim the great necessity for progress.

II. Aim to Be Found Only in Experience

How and where does man find his aim? Whence comes it? *Ex nihilo nihil fit.* Aim cannot be set up *de novo*.

Past experience
the source of
true aim. Nor can it be created by the fulminations of reason. The philosopher cannot retire to his retreat, and there, far from the distractions of the crowd, evolve it out of the workings of his own mind. *Aim can be discovered only in experience.* The aim which man to-day sets up to be reached by to-morrow's activities is all shot through with the colors of yesterday. The past gives him direction, the present gives opportunity for activity, and the future utilizes the results. Aim is, after all, nothing but the pleasant and profitable of yesterday projected into to-morrow as its goal. And when to-morrow shall have been successfully lived, its little step of progress will have placed the aim higher for the next day. Thus man is forever pursuing a flying goal, which he himself casts ever on before him. And it is this fact which raises him from kinship with what *was* in the lower realms of being—the realm of mechanism, of chemism, and of organism—to the highest realm of being, that of the conscious realization and pursuit of an aim which finally leads him to approach infinity in his development.

It is then in the day's work; in the crush and toil and struggle of life; in its joys and its sorrows, its victories and defeats, its hopes and its fears, that Reality exists
in the concrete. man finds the materials out of which to construct his life's aim. For these are the things of value. These are the real things of life. It is out of them that he must select the things that are worth

while. Out of them he must develop his life-theory, his concept of what, for him, are the great "goods" of life. Only through the medium of immediate, concrete experience does man come to conceive his end.

The three aspects of experience. What, then, is experience? It cannot be defined in terms which are simpler than itself, but its various aspects may be noted.

Experience may be described from three standpoints, (1) as a *process*, (2) as a *product*, and (3) as to its *function*.

As a process. Experience is the activity of the self, the reaction of the self to its environment. A being incapable of response, or one devoid of environment, would be utterly unable to experience. Experience as (1) a process. Experience must be achieved; it cannot be received. There is no way in which it can be given. Further, since the reacting self is essentially a social self, and the environment which calls forth the reaction is essentially a social environment, the experience process which is the resultant of their interaction is also social in its nature and may be defined as social participation.

Social nature of the experience process. The life-span of the individual may reach its three score and ten; the life of society is continuous from the beginning of human generations to their end. Man normally finds his life-process to be a part of this larger social process, whose origin far antedates his own, whose presence furnishes the matrix out of which his own development grows, and whose end lies at the close of the race's history. From birth until death man never knows a moment when he does not breathe a social atmosphere, measure himself by social standards, minister to social needs, and adjust himself to social requirements. The activities of the self are, then, both in their origin and their end, social

activities. Hence the experience process of the individual is limited by and included within the wider social process. There is no experience which does not have its social setting and coloring. On the other hand, there is no social process except as it is made up of the experience processes of individuals, wrought out in the day's living. For society has no existence except in the lives of the individuals of which it is constituted.

As a *product*, experience is the residual elements remaining from the reaction of the self to its environment,

Experience as (2) a product. the effects left in mind and organism from the life-process. It is conserved in the organism as *habits*, or a set of organized reactions, tendencies, and capacities; and in the mind as *criteria of reference*, or images, ideas, judgments, and standards of values with their various connections. Native tendencies and capacities are a social heritage, the habits of the race transmitted to the individual, and hence are essentially social. Individual habits and the various criteria of reference are likewise social in their nature in that they are impossible without social participation, or the functioning of the self in its social environment. And further, given the experience-process, they are inevitable, for all experience leaves its effect in mind and organism. Stated differently, nothing can be called experience which does not leave its effect in mind and organism, and no effect can be produced in mind and organism except through experience. Both quantity and quality of experience as a product will depend, therefore, on the character of the experience-process, which in turn is conditioned by the character of its two fundamental factors—the self and its environment, with their mutual interaction.

As to its function, experience serves first of all as a criterion of reality, or of that of which we must take account in our life-process.

Experience in (3) its function. The shadowy and elusive forms of *abstract truth* and *ultimate reality* which to the rationalist have their being somewhere outside the boundaries of experience, may be interesting enough as figures of the mind, but they have little weight in our conduct. It is only the body of concrete truth and immediate reality with which we touch elbows in the day's living that really has a grip upon our actions and an influence in shaping our lives.

Experience occupies the place of supervisor of weights and measures in our life's economy. It is the court of last resort in adjusting values among our motives and actions. Thus, experience is pre-eminently an instrument of control. Motives and acts upon which experience has put the seal of its approval come to be the ones which function in our behavior, while the ones which are not approved drop out and are lost. It is in this way that self-control arises. Or, better, a body of experience functioning in directing behavior is self-control. Experience determines attitude, which is but another name for the degree of receptivity of the already-achieved experience product toward new experience, the readiness of the self to respond toward its environment. Finally, through experience, the old constantly serves as a starting-point for the new. There are no gaps in our life-process, experience is continuous. Further, experience can be gained only by reconstructing the experience already on hand. Acquisition is, therefore, but a process of assimilation. It is this fact that gives life its continuity and makes possible a personal self.

III. Education as a Selective Agent in the Social Process

The social process, constituted as it is of the lives of an infinitude of individuals, is almost infinitely complex.

Great complexity of the social process. It is as broad as the sum total of human experience and as long as the racial past. It is an epitome of all that men have thought and felt and done and are now thinking, feeling, and doing. But not all the experience through which society has lived and is living to-day is equally valuable as experience; much of it is blind, without conscious purpose; much of it exists but for the moment, and does not possess permanent value; much of it is not typical, and hence will not serve to guide others. Furthermore, society, busied with its affairs and blinded with its immediate interests, is not always conscious of its own aim. Men are not yet wholly at home in the business of reflecting on the end of their striving and the best means of reaching this end. The teleological principle has not risen to full consciousness in man.

Hence the necessity of a selective agent. It becomes necessary, therefore, in a progressive society, that there shall be some agency whose function it is to select out the valuable and the typical from the social process, and to accentuate and emphasize this by bringing it to the social consciousness, particularly by causing it to be incorporated in the experience of each new generation. It is in this way that the trivial and irrelevant drops out and the significant and the permanent remains as a part of the social heritage. It is in this way that the progress which has already been attained is conserved and the aim

set higher for to-morrow. For the goal is advanced only as each generation in its own climbing omits the mistakes and utilizes the successes of the preceding ones. Defined broadly from the social side, *education is the selective agent which sets up and seeks to attain the social aim.*

As an institution, education emerges in a developing society as evolution becomes conscious; that is, as men come to possess the power to reflect on *Education as a selective agent.* values and weigh motives and conduct.

In other words, education has its rise when men become able to subject experience to analysis with a view to determining an aim to be achieved in the experience process.

When this stage has been reached, education is both necessary and possible. It is necessary because conscious *Education the product of social necessity.* evolution or rational progress assumes the selection of ends and the means for attaining them. And this selection is possible only through education. Education is possible at this stage, since a society which has progressed thus far is capable of formulating an aim and providing means for its attainment.

Education as an institution consists, in its most general sense, of all the factors which function as a means *Factors involved in education.* in reaching the social aim. These factors may be classed into two broad types: *first*, those which are not organized or specialized with reference to education but whose specific function lies in some other phase of the social process; and, *second*, the organized and specialized institution, the school.

Prominent among the unorganized factors of education are the social traditions, standards, and institu-

tions through which the social mind and purpose are expressed. The home, the neighborhood, the church, the state, the vocations and avocations all play an important part in education.

Unorganized factors. They supply the general substratum upon which the specialized institution, the school, must rest; they constitute the matrix out of which education has its rise, and furnish the atmosphere in which it comes to its development.

The unorganized factors of education do not formulate and provide for the carrying out of the educational aim; **These determine the educational aim.** they have other functions. Yet it is precisely in them, and in them alone, that the educational aim is to be found. These are the expression of the social mind and purpose. They are the various modes of the social process. And the social process carries its own end or aim inherent in itself.

IV. The Social Aim is but a Statement of the Progress Already Made as Manifested in the Present Social Process

The educational aim found only in the social process.

There can be no true aim except in terms of the social process, in terms of the lives of men and women as they touch shoulders with reality in the thick of life's experiences. An aim formulated in any other terms might possess form, but it would lack content; it would lack reality, and therefore be without compelling power to direct conduct.

The educational aim is synonymous with the social aim; indeed, the educational aim is but the social aim formulated and brought to the consciousness of society.

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The educational aim thus has its origin in the social process and leads back to it. The problem of the school,

The educational aim identical with the social aim. the special organ of education, therefore becomes perfectly definite, even though difficult. It is to discover the social aim through an interpretation of the social process, and

then do its best to realize this aim in the experience of its pupils. It is to fit the individual to be a participant in a concrete, changing social experience which is going on about him and of which his own life-process forms an integral part.

A definition of the educational aim which makes it but an interpretation of the social process has several

The social aim of education is definite. advantages. Not the least of these is its definiteness. It takes the definition out of the realm of pure opinion and attaches it

to reality. It therefore supplies a basis for criticising the educational process to determine whether it is resulting in the accomplishment of its aim. Such is not the case with any definition which conceives the aim as outside of or prior to the process, and the process, hence, as intermediary in reaching the aim. Good examples of

Indefinite statements of aim. definitions of this kind are found in the following two, which serve as excellent representatives of their type: "Education is

the harmonious development of all the powers of the individual." "Education is the adjustment of the individual to social living."

Indefinite nature of an aim from outside the social process. But what in the first definition are we to understand by "powers" and by "harmonious"? This conception rests on the impossible assumption that there are "powers" or "faculties" *per se*. But what meaning can a

power have except as the ability to do some immediate and concrete thing, to function in the actual reconstruction of an actual experience? The term "power" can have absolutely no definable meaning divorced from a concrete aim for the realizing of which it is to be exercised. Powers in the abstract are but creatures of the mind, and have no connection with experience, and hence possess no reality.

Nor can the term "harmonious" be any more definitely limited in such a definition as that in which it occurs. How are we to know when powers are in harmony? What shall be the criterion? Is there such a thing as *harmony per se* any more than there are powers *per se*? When are the powers of memory, imagination, observation, judging, and reasoning in harmony? What should be the amount and character of each as compared with the other? Has the educated Chinaman discovered the secret when he has committed to memory the seven sacred books, but without much thought as to their intent? If we say no, he will tell us that he must do precisely this in order to successful functioning in Chinese society. Are our powers less harmoniously developed than were those of the red man, who far excelled us in observation? This can only be answered when we know whether our social process requires the proportion of observation that was required in the experience of the Indian.

The mind's different modes of activity, such as memory, observation, reasoning, etc., are but modes of experience in a life-process whose character is determined by the social practice of the society of which it forms a

Powers possess reality only when acting in real experience.

part. There is no test for the harmony of these different processes outside of the end to be attained by them; that is, outside of the way they function with reference to concrete objects in actual experience. There is no way in which one can take the mind as a thing-in-itself and decide. As soon as this is attempted there is no criterion connected with reality, and the discussion is waged in the realm of opinion, and argument but results in confusion.

The second of the definitions quoted represents the social side of education as the first represents the individual side. It goes without saying that if, as has been shown, the individual is to be defined in terms of his social functioning, this must be understood with reference to a progressive society. But this is precisely what the definition does not provide for. Such a definition implies the possibility of training a set of capacities, powers, or habits so that they will fit the individual into the social situation, where he is to be left, his education completed and himself "adjusted" to living in the society of which he forms a part. The trouble with such a conception is that society would need to be entirely static in order for this adjustment to last. But the world moves. And such an individual would no sooner have become adjusted than a progressive society would move away from him, and he would be left stranded. Such a concept might be adequate for the old Chinese education in a static society or for Plato's ideal state where, when things were once adjusted, they were to remain so forever; but it is unsuited to any progressive society.

A definition of education which finds the aim contained in the social process also has the great advantage of an

Progressive society demands reconstruction of experience.

immediate as opposed to a remote aim. For the aim becomes but the successful carrying out of the process as a Compelling power of an immediate aim. process. The question is not whether an individual has this day taken an infinitesimal step toward a goal which is not only ill-defined but indefinitely distant, but whether he has successfully carried out to-day's part of the life-process, whether he has had real experience with some of the actual values of life. The educational ideal has often lost in compelling power through the vagueness and remoteness referred to. A hard task becomes but little more inviting to a boy upon his being told that he will need the power to be secured through its mastery when he has grown to manhood. But if he can be shown that this task is related to his own immediate life-process, to what appeals to him as worth while in his present experience, then a powerful motive has been put into his life. The aim is now not something supernumerary and beyond the possibility of realization, something to awaken aspiration, but something definite to do here and now. And this is far more fruitful.

The standpoint has also the further advantage of making end and means but the two aspects of a common process, and does away with the misunderstandings concerning their right relations which has so often divorced them. Education thus becomes the process of socializing the individual. It makes his aim to be participation in a social process which is constantly in the course of reconstruction, and such participation as shall result in progress both for himself and society. This means that his own experience must be in a constant state of reconstruction. Further, the reconstruction must be such as

The social aim of education relates means to ends.

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will make him growingly conscious of social values, and give him increasing control over the processes of his own experience. This, in effect, defines education as a process going on within the individual. As a product, education can be defined in terms of the amount of control which the individual has over his own experience.

The separation of the educational aim from the social process has its counterpart in other social institutions as

Separation of institutional from social aim not peculiar to the school. well as in the school. The misconception as to aim does not attach to any one institution of society, therefore, but rather marks a certain stage in social evolution. Every

social institution at the time of its origin grows immediately out of the needs of the society which gives it birth. This is but equivalent to saying that it is created for the purpose of carrying out a conscious social aim. As society becomes more and more complex, greater demands are placed on the institution. The institution itself must therefore become more complex, and there grows up within the institution a specialized group of individuals whose function it is to direct and

Professionalism tends to divorce institution from society. carry on the work of the institution. Here we find the origins of the professions and of professionalism. And a professional class, busied with the special work of an institu-

tion, are always in danger of dropping out of touch with the wider social aim. If this occurs, they come to look upon the institution as an end in itself and forget that it is but a part of a greater process, to whose needs it is its function to minister. As the breach between the institution and society widens, the aim of the institution comes more and more to be fixed by the professional class who direct it, and less and less by the social

process. It is at this stage that an aim is likely to emerge which is formulated from without the process, and hence not definable in its terms, as is illustrated in the definitions of education just discussed. There is abundant evidence for this statement in the history of the church, the state, the school, vocations, and even the home! It is this tendency of institutions to separate themselves from the actual social process which gives rise to the necessity for revolutions, again to place the institution in touch with the life and experience of the society of which it forms a part.

Education must, therefore, in all progressive societies be in a constant state of reconstruction. It must keep

The educational aim must be constantly redefined. pace with the social ideal and, accurately interpreting this ideal, must make this its aim. Instead of setting up an aim of its own in such abstract terms as "culture," "complete living," "development of powers," etc., education must identify itself with the most vital concepts and movements of society. It must realize that there is no culture that does not relate itself to social participation; that complete living is realized only in the largest possible contribution to the common good; that powers not employed in worthy social activities are as levers without fulcrums; that the only way to educate an individual is to socialize him.

Coming back to the original questions stated at the beginning of the chapter as constituting our problem, *Summary of answers to our questions.* they may now be answered in brief as follows: The general nature of aim consists in the formulation of the best elements of a present process as a goal for future activities. Experience is the only test of values, and that which has stood

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the test of experience becomes the end of future endeavor. The educational aim originates in the requirements of the social process and leads the individual into helpful and efficient experience as a part of this process. Education can have no meaning except as it represents the highest ideals of society for the individual acting his part faithfully in the concrete affairs of his day. Any other definition of education leaves it without point of contact with experience, and hence without reality.

The function of the educational aim is to guide in the selection of the means for realizing the social aim of which the educational aim is a part; that is, in determining the *subject-matter, method, and organization* of education. For these, the constituent elements of the school, are the instruments devised by society for the carrying out of its aim through education. And only as the means are adequate can the end be attained. The present aim of education is to be formulated only by an analysis and interpretation of the social process. The next section of our discussion will be devoted to an attempt at such an analysis and interpretation.

REFERENCES

Bagley, *Educational Values*; also, *The Educative Process*, ch. III; Butler, *The Meaning of Education*; Cubberly, *Changing Conceptions of Education*; Dewey, *Ethical Principles Underlying Education*; Eliot, *Education for Efficiency*; Emerson, *Essay on Education*; Howerth, *Social Aim in Education*; Monroe, *Text-book in the History of Education*; O'Shea, *Education as Adjustment*, Part II; Plato, *Republic*, Book VII; Rudiger, *Principles of Education*, chs. III-V; Spencer, *Education*, ch. I; Ward, *Dynamic Sociology*, ch. XIV.

PART II

THE SOCIAL PROCESS AND EDUCATION

CHAPTER IV

THE NATURE OF THE SOCIAL PROCESS

It was shown in the last chapter that the educational aim originates in the social process and leads back to it; in other words, that the highest end of education is to fit the individual to do his part in carrying out the social activities in which he finds himself a participant. But such statements, while perfectly definite, are not very illuminating. For the social process, consisting as it does of manifold activities of men, is almost infinitely complex, and needs to be analyzed into its simpler elements if such a concept is to be useful as a norm in education. What goes to make up the social process? What is its nature? What are its constituents? How are they interrelated, and how is the whole related to the life, experience, and education of the individual?

Same facts
reached from
individual or
social point of
view.

The results sought through an analysis of the social process could be reached equally well through an analysis of the modes of individual experience. For the modes of activity by which society carries on its collective life, and the modes of experience constituting the life of the individual are but the two aspects of one

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unitary fact. Hence the problem is identical whether approached from the one standpoint or the other. The advantage of approaching the problem from the social point of view is that it serves to emphasize still further the essentially social nature of education, both as to its aim and its content.

Any complete and wholly adequate analysis of the social process must deal with the process as a whole, and

A cross-section view not adequate. not simply with a cross-section of it. For, no matter how accurate the analysis of the social activities of to-day, or how perfectly they are interpreted *per se*, their real meaning and significance will escape us so long as they are cut off from the process of yesterday and that of to-morrow. The very core of the concept of social evolution is *unity*, and this, in a dynamic society, means *continuity*. An interpretation of the present involves, then, both the past and the future. What *is* can be understood only in the light of what *has been*, and also what *will be*. Viewed by itself, the present lacks perspective, and hence its values are distorted and are seen out of true proportion.

Manifestly it is beyond the scope of the present study, as it is certainly beyond the ability of the writer, to enter

Limitations for the present study. into as far-reaching an analysis of the social process as that just indicated. An interpretation of the past requires an evaluation of the great lines of human culture in the process of their evolution; it weighs developing civilization in the making, and gives each factor its value in the light of what it has come to and what it seems to be pointing toward. The interpretation of the present demands even greater scope of vision and depth of insight. For the sieve of time has large meshes, and most of the trivial

and insignificant from the life of the past has been lost out without being carried over to the present, and hence we do not have to trouble with it. But the present, in the midst of which we live, move, and have our being, is a mighty, rushing torrent. We can judge the general direction of its current, but we are bewildered by its eddies and cross-currents; its waves of impulse and tides of passion often seem to be flowing backward; its progress is impeded by masses of flotsam and jetsam; its hidden rocks and sunken reefs have never been fully charted.

This makes the evaluating of the present social process difficult, but not wholly impossible. It is difficult because of the amazing complexity of present-day life, and also because of the lack of perspective; neither men nor events can be seen clearly when one is too close to them. The task is not impossible, because the factors of the problem are definite and their interrelation in the process analyzable.

Difficulties involved. The interpretation of the future must, of course, be in large degree hypothetical. Yet this in no sense invalidates the interpretation or renders it useless. An intelligent hypothesis is a far safer guide than blind chance. Indeed, all the conscious progress of the race has been accomplished by following promising hypotheses, which have had, of course, constantly to be reconstructed in the light of new experience.

Our programme in this work does not, then, include a comprehensive analysis of the social process; and fortunately such an analysis is not required in our problem, which is to discover the social and philosophical basis of education, rather than to work out the details of the educational process as carried on in the school. Our purpose will be served

An outline view will serve purpose.

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by an outline analysis of the social process sufficiently complete to show its chief interrelations and the place of education in the larger whole of which it forms a part.

The social process, although so complex, can be analyzed into comparatively few great lines of experience.

The social
process falls
into a few
great modes of
experience.

In making such an analysis, however, it must not be understood for a moment that these lines are really separate and independent. The social process is essentially a unitary process; experience is emphatically a unitary experience, and the experience process is one and not many. The analysis which follows only attempts to emphasize the different elements which, interwoven, constitute the whole, whether this *whole* is considered as the unitary social process or the equally unitary experience process constituting the life of the individual.

REFERENCES

Forrest, *Development of Western Civilization* (a genetic view); Giddings, *Principles of Sociology*, Book IV, chs. I, II; Small, *General Sociology*, Parts VI-IX.

CHAPTER V

EDUCATION AND INSTITUTIONAL MODES OF EXPERIENCE

I. Institutions the Product of Social Evolution

The social process includes all the interrelated activities of men. By far the greater part of these activities are organized into well-defined groups, each group having its own particular structure of organization and technique of operation.

Institutions are an important phase of the social process. We call these organized groups of activities *institutions*. An analysis of the social process is therefore largely an analysis of institutions.

Institutions represent the collective development of social experience. They grow up naturally out of the common impulses and activities of men.

Nature of institutions. The social activities fall into various definite groups, each group having for its aim the carrying out of some phase of the social purpose. One such group gives us the family, another the state, another the church, etc. Each institution arises in response to a social need and gives expression to social impulses. New institutions emerge whenever society feels the necessity for a specially organized set of activities for carrying out the social purpose; old institutions die whenever society no longer needs such organized activities. All progressive societies are constantly becoming conscious of new social purposes; hence new institutions

are having their birth, or existing institutions being moulded to fit the social demands at all times. Progressive societies also entirely outgrow certain of their social purposes, and hence have no need for the institutions whose function originally was the realization of such outgrown purposes. Thus it is that history is filled with the records of institutions that have served their purpose and been discarded by societies which no longer felt their need. Institutions, therefore, like persons, have their birth, growth and development, decay and death.

Institutions are at once the product and the mode of social evolution. They are society's invention for pro-

Institutions the product and mode of social evolution. viding for co-operative activities. Man's impulses are essentially social, and his powers can be developed and employed only as he uses them in conjunction with

fellow men. Hence institutions are the individual's opportunity for self-expression. He fits into them as naturally as if they had been made especially for him; he finds them suited in organization and methods to the exercise of his powers and capacities. This must needs be the case, since hundreds of generations, moved by the same impulses and endowed with the same powers as those possessed by himself, have, in trying out their experience, left the institutions as an expression of their collective wisdom, and as their solution of this particular group of social problems which now are confronting the individual anew. The person who is bearing his part in a progressive society will of necessity criticise matters of detail in the structure and method of the various institutions, but he will find the fundamental concepts involved in them to be adapted perfectly to his own

mental constitution. He will feel at home in the social institutions of his day, and realize in them the opportunity to function as a member of society and a participant in the social process.

Institutions not only furnish the opportunity for the individual to function socially, but, on the other hand, ^{Conservative nature of institutions.} they in some degree limit his activities as well. For institutions are in the highest degree conservative and can change their form but slowly. It often happens, therefore, that the social ideal is far ahead of social practice. Our theory of political, social, and industrial democracy is not yet realized; our dream of universal brotherhood of man is still disturbed now and then by the tramp of armies; church practice has not fully caught up with the Christian ideal; and educational theory is very far ahead of the results achieved in schools.

The individual finds in the necessity of modifying institutions, to adapt them to progressive social needs, one of the chief opportunities for the exercise of personal initiative, and for a contribution to social advancement. For institutions must change as society progresses, else, instead of being the instruments of progress, they become barriers in its way. Further, the reconstructing of institutions can be successfully accomplished only by their active membership, operating from within the institution and prompted by a constructive aim. The iconoclastic critic, attacking the institution from without its membership, may serve as a goad, but there his usefulness ends. It is ultimately society's positive ideals, and not its negative criticisms, necessary as these may be, which constitute the structure of institutions.

^{Institutions modified through individual initiative.}

The individual is completely immersed in institutions. So completely do the institutional activities cover the whole range of social life that the individual finds it impossible to function except in connection with institutions. It is true that he may not always have formal membership in an institution, but nevertheless he is subject wholly to the limitations that it imposes and the opportunities that it offers. Not every one has his name on the church roll, yet so completely do the spirit and standards of the church permeate the social organization that its influence is dominant in every line of social activity. Similarly for each of the institutions. The individual must breathe an atmosphere impregnated by their spirit and participate in the activities which constitute their life. In them he develops his powers, and to them he owes his allegiance and service. To fit the individual to participate in the institutional life of his day becomes, therefore, one of the great aims of education.

We will now proceed to a brief consideration of some of the more important social institutions. From the standpoint of the philosophy of education, each of the institutions is to be looked upon from two points of view: *First, its educational influence upon the individual*, the opportunity it gives him for self-realization through the employment of his powers and capacities in social activities. *Second, its setting a standard of requirement or demand for the individual's education.* Failing to meet this demand, no amount of learning or of training of "powers" has fulfilled the end of education for the individual.

Two relationships of institutions to education.

II. The Family and the Individual

The earliest institution to be developed in society is the family. Farther back than we can penetrate into

Nature of the family. the history of the race the family existed. It has had various forms and has occupied positions of vastly different importance among other institutions at different times. But after all *man, woman, and child*, two premises and their conclusion, constituting the "practical syllogism"—these combine to form the most natural, the most ancient, and the most vital of all the social units.

Not only from the standpoint of society, but also from the standpoint of the individual, the family is the funda-

Contribution of the home to the individual. mental institution. It gives to the child being. At first the home forms the sole environment, and for a considerable time thereafter the principal environment of the individual. It protects and nourishes him during the most plastic and formative period of his life. It saves him from economic pressure during a long period of dependence, guards him from pitfalls, and supplies a congenial atmosphere for his development. In the home, the child, through imitation, learns a language, adopts ethical and religious standards, and becomes familiar with social forms and usages. Here he learns obedience, has his first experience in social co-operation, forms the habit of work, develops the concept of economic necessity, and learns to earn and save. Under right conditions the home constitutes the greatest formative influence in the education of the individual. The life of the home comes to color the life in all the other institutions. The inter-

ests and activities of the home furnish the basis for the interests and activities in the wider life of society. It therefore behoves society to see that the home fulfils its function not alone in bringing the child into existence, but also in carrying out its full share of his education.

The fundamental impulses on which the family rests are among the most deeply rooted of any in our natures.

Fundamental relations in the home. These have long served, and will continue to serve, to bring about the most important

relations in the home, namely, those of *husband and wife*, and of *parent and child*. Economic necessity also adds the relations of *provider* and *disburser*. These relations are not, in the broad sense, optional with the individual, but must be entered into and efficiently fulfilled. And each of these relations makes its own peculiar demands upon the individual, which it is the function of education to prepare him to meet. Failure of function here not only results disastrously for the welfare and happiness of the individual, but endangers all other social institutions as well.

The home may be said to rest on a triple basis: (1) the biological, or the impulses of sex, which lead to mating;

Threefold basis of the home. (2) the parental instinct of love for the child, which prompts to the care and nurture of children through the long period of helplessness and plasticity constituting infancy; and (3) the economic advantage obtained through the division of labor and responsibility in the family.

Social changes affecting the home. The past century has been a time of radical and extensive change in nearly all the social institutions. The face of the earth has almost been made over in that time. The old industrial and social lines have disappeared. Society has

had a new birth. In this general readjustment, the relations and functions of the home have been vastly modified. Its structure remains the same, but the method of its activities is very different. These changes have had far-reaching consequences both for the home itself as a social institution and for the school as an institution closely allied with the home in the education of the children.

Lying at the basis of these changes in the home are the great economic changes resulting from the passing

Influence of industrial changes. over to the factory system in our industries.

Following the invention of modern machinery and the application of steam and electric power, machine labor began to displace hand labor. It was found more profitable to set up a group of machines in one place than to have the machines working one in a place, and the modern factory came into being. Within three generations, America has passed completely from the system of domestic manufacture to that of the factory, making one of the most sweeping changes ever effected in an institution in so short a time.

Three generations ago almost every article used in the home was made or prepared by the members of the family

Former home industries. at the home. The wool for the home-spun garments was raised, clipped, carded, spun, dyed, woven into cloth, and made into clothing in the home. The meat was raised, slaughtered, and cured on the farm; the grain was sown, harvested, threshed, sometimes ground into flour, and made into bread without the help of others than those in the family; all the vegetables and fruit were home-grown, and the winter supply was packed away, preserved or dried in the autumn without the aid of factory-made cans. In the workshop with its motley array of tools was fashioned most of the furniture for the home and the machinery

for the farm. The family life of this day was very full of industry and activity. Every member from the child to the aged grandparent had a share in the household work and responsibilities.

But this is a picture of the past. The old-time home with its multiplicity of industries, its social seclusion,

New order of industries: and its individual responsibility has passed away never to return. It is no one's fault; it could not be helped. The demon of

enterprise came among us and gave us factories, and we were obliged to hand our industries over to them. Food is now ordered by telephone and comes ready for the table; clothing is made in the shops and comes to the home on trial or approval; the pressure of an electric button lights the house, and the steam laundry washes and irons the clothes. The workshop has been transformed into a garage, and the vegetable garden into a tennis court. Of all the olden home industries, practically all except cooking and cleaning are gone. And what with prepared foods and vacuum cleaners these bid fair to follow.

Two great losses to the home. Growing out of these economic changes, the home has suffered two distinct losses:

(1) *the loss of industrial training for the children;* and (2) *loss of companionship between parents and children.*

Robbed of opportunities for industrial training, the child lacks one of the most vital forms of experience. It

The child's loss of industrial training. has remained for modern education to discover the close relation between the training of the hand and the development of the mind. The child is essentially creative and constructive in his impulses. He is interested more in things than in symbols; he cares more about making things than think-

ing about them. The developing self demands expression even more than impression. The body as well as the mind craves exercise. Nor does the exercise of mere play, necessary as play is, fully suffice. For the individual must learn to work; his powers must be employed to a purpose; symbolizing, theorizing, and dreaming fail finally to satisfy the individual, as they fail of social accomplishment; his dreams must lead to deeds, his play must eventuate in work. Life must finally come to find its chief joy and satisfaction in labor.

The transference of industrial training from the home to the school is now in the process of accomplishment.

Industrial
training trans-
ferred to the
school.

Industrial studies are becoming an integral part of almost every school programme. But no matter how efficient the school may become in teaching the technique of the handicrafts, it can never wholly make up to the child for their loss from the home. For in the industries of the home the incentives were very real, the interests very immediate, and the necessities very concrete. The aims possessed a touch of reality which must in some degree be lacking in the most perfect of school exercises. But it cannot be helped. The greater part of the industries of the home are gone past any possibility of recall, and it only remains to make up to the child as best can be done in other particulars for this loss.

Probably the greatest loss which the home has suffered through the changes it has been undergoing is the loss

The child's
loss of "com-
panionship"
with parents.

of comradeship and close personal touch between parents and children. In the old-time home the boy was the constant co-worker and companion of his father, whose words of wisdom and views of life unconsciously built

themselves into the ideals and practice of the son. Every girl was the helper and comrade of her mother, whose life became the daughter's standard of womanliness. The very isolation of the family made it dependent on its own resources for social entertainment and diversion. The long winter evenings were spent in telling stories, recounting traditions, or reading books of romance or adventure. Games were played, apples roasted, nuts cracked, and a jolly time was had around the family fireplace. It is hard to measure the social value of hours like these spent in the family circle.

But this picture, like that of the industrial activities of the olden home, belongs to the past. Specialization of labor has taken the father from the home and sent him to the factory or the mill. And, even if he is a farmer, modern machinery is such that the work of father and son is, for the most part, separate, and they hardly meet in the fields. It comes about, therefore, that many fathers of the present day see more of the office boy or the clerks they employ than of their own son. In many homes the father is the chief financial agent for the family, but aside from this enters comparatively little into their councils. It is also true that the mother and daughter work together less in the household duties than formerly, and not a few mothers know more of the daily life and thought of the house-maid than of the daughter.

To these conditions, growing out of the change in the economic life of the home, must be added other conditions of similar trend coming from the increasing demands of school and social life upon the time of the children. What with the requirements of the regular school day, the home

The school keeps children from home.

lessons, the athletic events, the social functions, and the free and almost unrestricted associations of young people with each other, there is very little time left for family life together. And, even if the children themselves had the time for the family social hour, the social and the club engagements of the parents would greatly restrict the opportunity for family association.

The greatest divorce evil that threatens the American home is not the legal separation of husband and wife,

*The new type
of divorce evil.* but the separation of parents and children under the new conditions which are obtain-

ing. It is not that parents love their children less or that children are any less open-hearted and responsive than they were. It is only that the home has been changing, and that the tender and close relations of the home have not stood the strain of changing conditions. There is a grave danger that the home shall become chiefly a biological and economic centre—a place where children are born and supplied with food, clothing, and shelter, but with that greatest of all educative factors left out—the companionship and comradeship of parent and child.

The old home with its isolation from neighbors, its busy industries, and its broad fireplace is gone. Society

*Adjustment to
new conditions.* must seek new solutions for the problems of the new home. For the home as a true home for children must be saved; nothing

can take its place. We must adjust ourselves to the changed conditions. It is not enough that the children be well housed, clothed, and fed. They are now well read. The school teaches them something of music and art. They are acquainted with a bewildering complexity of plays and games. They are learning manual training,

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scientific agriculture, and the industrial arts. They are entering into all these things with heart, hand, and brain. The home must recognize that the boys and girls of to-day live a much broader life and have a far wider range of interests than did their parents and grandparents, and provide for these new activities. Nor can all these things be handed over to the children without the parents taking a part. Games, amusements, and books shared with the parents have a double significance for the child. And, above all, it is only by entering into the active interests and life of the children that parents can obtain a sympathetic understanding of them, and so win their confidence and comradeship.

Parents also need a more specialized knowledge of their children. Scientific knowledge and technique as applied

New demands upon parents. to the industries, arts, business, and agriculture have increased marvellously in recent years. But no corresponding advance

has been made on the part of parents in the knowledge of children and the technique of rearing them. Although there is an abundance of scientific material easily available relating both to the physical and the mental life of the child, most parents are profoundly ignorant of both. Is it not worth while for parents to know something of the nature and unfoldment of the child's mind? Is not the religious nature of the child a vital and worthy object of study? Is not the growth, nutrition, and care of the child's body a scientific problem which will give the key to the more successful rearing of children? Would it not be worth while for the parents to be able to reveal to the children in an accurate, delicate, and scientific way the secrets of their physical being, rather than to allow these things to be learned from chance information at the

school or on the street? Will it not yield as large returns to apply scientific method to the rearing of children as to the management of a factory or the running of a business?

These requirements of the home all inhere in the social process. The demands of the home are the demands of society. To function as a member of society, the individual must be able to meet the obligations resting upon him as a member of a home. *The educational aim must, therefore, not fail to include the fitting of the individual for this the most important of all his social functions, that of sustaining in a worthy home the relations involved in the family.*

III. *The Community as an Educative Factor*

When the individual first extends his activities beyond those of the home, he finds himself participating in the life of the community. The community cannot strictly be called an institution, since it lacks definite organization and does not undertake a specific programme of characteristic activities. Yet the community forms so important a factor in the life of the individual, particularly during his earliest years, that it deserves some consideration in our discussion. It is the community that offers an opportunity for a wider and more generalized experience than is possible in the home. Here the activities are less specialized, and hence less closely organized. Parental authority and care are lacking, and the child is thrown more on his own resources for control and the conservation of his personal interests. The boundary lines of the community are not clearly drawn as they

The community extends the child's social environment.

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are in the home, and thus the community leads directly out into the wider social life which in the end encompasses the race.

The community greatly extends the social relationships of the individual. It is here that he learns to know

Types of relationship afforded by the community. *friend, neighbor, comrade, companion, play-fellow, chum.* And these relationships afford opportunities for types of experience which

rapidly develop and discipline the social consciousness, preparing it for the still wider touch with men in all possible social relations. The community also gives rise to various organizations, such as clubs and societies of many different kinds, which come finally to absorb not a little of the individual's interest, and no small proportion of his time and activities. These are coming to play an increasingly larger part in the child's experience, and their nature and number constitute one of the serious educational problems of the day.

Importance of community environment. The environment supplied by the community, coming to the individual during the very plastic period of his life, and remaining for many the most important social medium after the home, plays an important rôle in education. The stream of suggestions pouring in upon the child from the material part of his surroundings, the æsthetic values received from lake, river, and beautiful parks or ugly tenements, from rolling prairies or dirty alleys, are all built faithfully into the life structure. Likewise the ethical and religious standards, first by suggestion and unconscious imitation, and later by conscious adjustment to their requirements, have an important formative influence. Saloons, gambling halls, and dens of vice supply no worthy stimuli for the youth, and, even if not fre-

quented, have a constant tendency by their very presence in the community to dull the moral sense. The theatre, possessing great educative possibilities, is, on the whole, not an elevating influence in many communities. The nickel theatre, which might be made an important agent in education, is often of questionable value as an amusement, and at its worst is a positive menace to the morals of the community.

The modern tendency toward municipalization is tending to break down the older type of community life.

The city hospital to community spirit. Twenty families, living together in an apartment house which occupies a smaller area than that required for a tennis-court, using common hallways and elevators, and passing each other at close range daily, and yet without knowing each other's names or employments or extending even the most formal greetings—this comes far short of being a community or a neighborhood. Nor is the situation helped when this building is flanked by literal square miles of other similar buildings equally crowded with people who know as little of each other. Without doubt there is a distinct loss in this mode of living which can be compensated for only in part by the advantages afforded in other lines by the modern city. Neighborhood clubs, social settlements, and various other clubs and organizations have been devised to supply the loss suffered by the passing of the community in cities. The problem will perhaps receive its best solution finally through the medium of the public school, which is coming to be looked upon as the neighborhood centre and meeting place in many of the larger American cities.

Society has not yet awakened to the importance of the community as a factor in education. With the les-

sening of the influence of the home in the life of the child, there has been, except in the larger cities, a cor-

The community as a factor in education. responding increase in the influence of the community. Children hardly yet entered upon their teens participate far more in the community life than was done by their grandparents when full grown. And it is a grave question whether, along with this increase of influence, the community has not at the same time become on the whole less safe and serviceable as an educative factor.

If the community is to do its part in the education of its children, it has two problems yet to solve. *First*,

Demands on the community. it must provide an environment whose influences are pure and wholesome. The stream of suggestions daily pouring in upon the child must be free from taint; they must prompt to high ideals and worthy living. *Second*, the community must recognize and provide for the social impulses of growth. It is not enough to ring a curfew bell and forbid the boys to join a gang and the girls to be on the streets unattended. Negations never remove impulses, but at best only slightly deflect their course. Further, most of the impulses leading to irregularities of youthful behavior are fundamental to development, and only need suitable modes of expression to become a serviceable factor in education. Let the community, therefore, open a library well supplied with books and magazines adapted to young people; let it provide a well-equipped gymnasium; let it maintain a room where a great variety of suitable games may be played; let it see that church, or school, or municipal building opens its doors to the young people for an occasional social function; let it encourage the organization of clubs and societies for its boys and girls.

For, in proper measure, these things all belong to youth and its education. Expression, rather than suppression, is the law of growth.

IV. The Church as a Social Institution

The church is the organized religious activity of society. As an institution it expresses the sum of religious

**Social nature
of religion
and the
church.** culture, man's ideal of religious experience and the technique of religion. The concept of religion is essentially a social concept.

The idea of the fatherhood of God involves the ideal of the brotherhood of man. The religious impulse is pre-eminently an impulse to service. The developing concept of God has shown him to be no dread being to be propitiated that he may not visit man with dire calamity, no partial deity crowning one people with the fruits of his good pleasure and visiting another with the accumulation of his anger, nor a God of vanity whose pleasure is to be satisfied with man's praise and adulation as a measure of his religious development and experience. It has shown him to be rather a God of experience, a positive force at work in the world and in the lives of men prompting them to higher ideals and nobler living, a presence that manifests itself most clearly and efficiently in connection with the actual run of experience as man participates in the world's work.

**The social
concept gives
reality to
religion.** This wider concept of God has made religion a very practical matter; it transforms it into a manner of living, thereby taking it out of the realm of the unreal, or semi-unreal, in which all things not reduced to experience exist. The church thus becomes an important social

institution, a means of realizing the higher impulses and most fruitful experiences of the individual, and of educating to the noblest social ideals and practice. It is the instrument of righteousness, which must ultimately become the ideal of every progressive society.

The scope of the social programme of the church is at present the subject of much discussion and not a little difference of opinion. The influence of religion permeates all experience, touching life at every point. Yet the church as an institution cannot extend its activities so far as to participate in the functions of all the other institutions. The purpose of the church is rather to cultivate in its members the religious spirit and ideal, the ideal of righteousness as expressed in personal life and social service. The nature of neither the church's aim, therefore, nor its organization permits it to develop a technique in many lines of social activity. But, neither must the church allow theory to be separated from practice, else theology supplants piety and the church loses its hold on society through losing contact with social interests and needs. The essence, or at least the outcome, of religion is expressed in service, and the church must inculcate this ideal in practice as well as in precept; it must render social service as well as preach it.

It would seem, on the one hand, that the church could best accomplish its mission by impressing the religious spirit and method upon the social organizations already at hand. For example, the church should not expend its energies in duplicating schools supported by the state; but should only enter this field when it is evident that there is an educational need which is not being met by existent insti-

tutions. The church should not compete with philanthropic organizations under municipal or independent control, but co-operate with them. But, on the other hand, an earnest aggressive church will find many points of contact with society that have not been occupied by any other form of social activity. The needs of man are many sided; wretchedness, ignorance, and poverty are all too common; vice stalks unchallenged in many places; the necessity for innocent recreation and amusement is immediate and pressing. The various social institutions, in parcelling out among themselves the activities covering the social demands, have not occupied the whole territory; they have left vacant areas here and there.

It is in these unoccupied places that the church finds its opportunity for organized social service. Nor will

*The church
to comple-
ment, not to
compete.* this social service of the church be the same in all communities. For it must apply its energies at the point of greatest need, and

not at the point of competition. In one place the church may need to organize philanthropies; in another, to institute and administer playgrounds; in another, to found schools; in another, to fight graft and vice; and in still others, only to provide the regular religious programme of preaching, prayer meetings, and Sunday-schools.

It is in the congested regions of great cities, where the mental and the social horizon are necessarily nar-

*The institu-
tional church
and city slum.* row; where material wants are pressing; where opportunities for recreation and self-improvement are sadly lacking, that the institutional church finds its warmest welcome and its greatest opportunity. Its hospitals, its playgrounds, libraries, and classes for instruction come to stand for organized

Christian kindness. In ministering to the physical and social needs of its people, as well as to their spiritual needs, the church secures a correspondingly stronger hold on their interest and affection, and thereby secures their loyalty and support in return for its services. For the community is appealed to in a new and more powerful way when it feels that the church is concerned in the welfare of the whole man, and not just a part; and that the here as well as the hereafter forms a part of the definite programme of the church.

The most ambitious social programme so far undertaken by the church has been in the line of general education. Almost from the first, the Christian church has conceived the education of its adherents as one of its chief functions.

The church and education. Long before the state had undertaken any comprehensive scheme of universal education, the church had provided schools, not alone for its members, but for all who chose to avail themselves of the instruction. In America, the church has played a far less important part in education than in England. Yet, here, the Catholic Church, which has but few higher institutions, supports and administers thousands of elementary schools. The Protestant Church, which has given its attention chiefly to higher education, has organized, and in some degree controls and supports, a large proportion of the higher institutions of the country. In England, the church has had almost full control of practically all elementary education up to about a generation ago. Since that time, however, the state has been supplanting the church through extending its control and support to include elementary education.

It is inevitable that, as the concept of universal education comes to dominate the social mind, the state shall

assume education as one of its principal functions. The task is too large for the church, both on the adminis-

The state the chief support of education. trative and the financial side. Further, the existence of many sects within the church,

each jealous of its own doctrines and methods, renders it impossible for the church to administer a system of universal education. The state now supplies adequate educational facilities for the elementary and secondary instruction of its young in nearly every community. It may well be questioned, therefore, whether it is necessary or wise for the church to compete with the state in this field of education.

The state has not as yet supplied sufficient facilities for higher education for all who desire it. The church

The church and higher education. can enter this field without competing with the state in the same degree as when at-tempting to give elementary education.

The church has also up to this time felt the need of its own higher institutions for the training of its leadership. It has demanded that its leaders have an opportunity for receiving their higher education in schools dominated by Christian ideals and supplying a religious environment. Not willing to trust this to the schools of the state, the church has freely spent of its energy and its treasure in establishing and maintaining colleges and universities. The control of the church over these schools, however, has gradually been loosening, and in many instances the relation between church and college is now purely nominal, and in other instances has been wholly dissolved. Unless the church can succeed in impressing religious standards and ideals upon the higher institutions which it no longer controls, and can thereby supply an environment favorable to the development of the Christian

spirit in such schools, its withdrawal from the field of higher education cannot but prove disastrous for the leadership of the church.

Whatever may be the future of the church's activity in the field of general education, however, it is clear that

The church chiefly responsible for religious education. it must be chiefly responsible for religious education, and must not fail in its task. It is impossible in America, where there is such a diversity of faiths and creeds, to teach religion in the public schools. Coupled

with this is the deplorable fact that the home is no longer concerning itself with religious education of children in the same degree as in former times. The result, then, must be that of throwing a constantly increasing burden on the church in providing for the religious education of its youth.

It is probably fair to say that at the present time the church is not adequately meeting its responsibility at

The church not meeting its responsibility. this point. The result is that religious education is on the decline. Unquestionably there is a far less general knowledge of the

Bible now than there was fifty or one hundred years ago. Also, the children are attending church, and probably Sunday-school, in considerably smaller proportion. The church has not yet fully awakened to the fact that the religious education of its children, and not preaching to adults, is its most important function. This is seen in the fact that the church is organized and conducted chiefly for adults, and not for children. And yet, childhood and youth certainly supply the most fruitful soil for religious nurture and instruction.

The Sunday-school cannot be expected to show the same efficiency in organization and method as the public

school. It meets too infrequently, and its officers and teachers are largely untrained for their work, and hence inefficient. But, even making allowance for this handicap, the church has been slow in making use of the educational principles tested, proved, and applied in the public schools of the day. The pedagogy of the Sunday-school is from fifty to one hundred years behind that of the public schools. Organization, curriculum, and method are all archaic. Encouraging signs are beginning to appear, however, in the movement recently initiated in several of the denominations looking toward a graded curriculum, better organization of the school, and normal classes for the training of the teachers. One further step yet remains in the preparation of the ministry for the educational work of the church: this is that they shall be as well trained in the principles of practical sociology and the art of education and teaching as they are in the Bible and theology.

Institutions, like nations, have their crucial times. The church of the present is rightly concerned over the limitations of its influence. Only a comparatively small proportion of the people of any community are church-goers, and this proportion seems to be decreasing. Thousands of those living in the larger cities never see the interior of a church building, and the same is true of the rural communities. In many of the crowded industrial districts of cities, where people live in swarms, the churches find it difficult to eke out an existence, and many of them have to depend for support on parent churches situated in more favored surroundings. The marvelous period of industrial progress through which America has been passing for almost a century has had a tendency to culti-

The limita-
tions of the
Sunday-school.

The church
confronting
a crisis.

vate a materialistic attitude of mind. The "goods" of life have come to be measured largely in *goods*. Ethical standards in business and politics have not always stood the strain. Religious zeal has had a tendency to wane, and the church does not exert the relative influence and possess the importance of a generation or two ago.

Yet man is, after all, fundamentally religious. He may temporarily have lost perspective in measuring values.

The opportunity of the church. But there is evidence of the rise of new ideals and standards; the social conscience is awakening, and other values than money are exerting their appeal. In this reconstruction the church is facing a great responsibility and opportunity. If it proves equal to its opportunity, its standards and ideals will dominate in the leadership of the great social movements now getting under way; if it shall fail to measure up to its responsibility, it will not only have missed its opportunity, but society will be immeasurably the loser through lacking the inspiration and steady power of the religious impulse inculcated by the church. For the ethical standards of the church are the only ones which render life and property safe. Its morals are the protection of the home. Its ideals and practices give tone to the entire social order. Efficient social participation requires of the individual that he shall function as an actual member of the church, giving support to its enterprises and serving worthily as its representative.

The educational aim must include the church. The educational aim must therefore include the fitting of the individual into the activities of the church. This does not mean that particular faiths or creeds are to be taught in the schools. On the contrary, this can be done only in the church and the home. The school can,

however, through its instruction and its curriculum, lay broad and deep the foundations of reverence for the Creator of the universe and the laws that control it. The social concept can be developed and the ethical consciousness quickened. The moral impulses can be cultivated and the sense of personal responsibility enhanced. The school can accomplish these things even with the limitations imposed upon it as to teaching religion. And these things constitute, after all, no small part of the content of religion.

V. *The State and the Educational Aim*

The state is the most comprehensive of all the social institutions. In one sense it may be said to include all

The state includes the other institutions. the others, since the state provides for their organization through its constitution and laws and protects them in the exercise of their functions.

In the state the whole of society joins hands, making common cause and seeking a common welfare. The state represents, therefore, the activities of society as an organic whole, as against such smaller units as the family, the church, or the community. In the state all the narrow and intensive loyalty of the smaller social units is supplanted by the broader and more extensive devotion to the welfare and progress of the whole. In the activities of the state the social horizon of the individual is wonderfully broadened. Service must be rendered and sacrifices made, not for those of his own family, community, or cult, but for people whom he has never seen and does not know. The social bond comes to have a new meaning, and the term *common good* comes to include every class and condition of society.

Co-operative activities are undertaken, not for private profit, but for public welfare; rules of justice are established and conditions of equal opportunity set up for all alike.

The state has existed in many different political forms, running the whole gamut from the most absolute of monarchies to the freest of democracies. Undoubtedly many different forms will con-

Fundamental principles of the state. tinue to exist, but whatever the form, the foundation principles of *justice* and *equal opportunity* must obtain if the political organization is to be permanent and if society is to progress. The pages of history are filled with the tragic records of nations that have denied their citizens one or both of these fundamental rights, and themselves perished through their short-sightedness; and modern Russia seems unable to read the lesson of the past and is piling up for herself a heavy account against a sure day of reckoning. (?)

The activities of the state may be divided into two broad classes which may roughly be described as *positive*

Two types of functions of the state. and *negative*. The negative function involves the restraint of the anti-social and the prosecution of unavoidable wars. While

these functions are purely negative in the sense that they only remove obstacles to progress instead of furthering actual progress, yet they are absolutely necessary and vital to the very existence of society. For there is a sufficient residuum of selfishness and evil lurking in human nature that its expression must be restrained and discouraged; hence, our restrictive laws and system of police, our courts, and our jails. Let this function of the state fail, and life, property, and virtue are no longer safe, every other institution totters, and the state itself

cannot long exist. Wars are becoming more rare; they should and probably will altogether cease. No nation can hereafter justify itself in the eyes of the world in going to war from selfish motives. Only when the national integrity is threatened, or the weak are oppressed, is a people justified in going to war. Yet selfish and belligerent nations do still exist, and all nations will therefore probably be obliged for the present to maintain armies to insure their own safety and self-respect and to carry out their part of the world's social programme.

The negative function.

In the exercise of its positive function the state first of all seeks through its laws to establish justice among individuals; that is, to provide conditions which will allow full and equal opportunity for every individual to exert his powers within the limit of the common good. The state, having in mind the universal good, must have the right, of course, to say where the exercise of one person's powers are interfering with others in the exercise of their powers, and hence set the limits to acts of the individual which would interfere with the general good. What is true of the rights of the state as to the control of individuals must apply to its control over institutions. The rights and powers of the state are supreme, for the state is *all* the people acting for the greatest good of all.

The positive function.

The positive function of the state also extends to the carrying out of certain lines of activity related to the general welfare. There are many undertakings which, because of their stupendous nature, can be carried out only by the state. Present illustrations of projects of this nature are the building of the Panama Canal and the vast reclamation projects

Projects best carried out by the state.

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under way in the Western States. In addition, there are certain other projects of such nature as to require uniform administration for the whole country, and hence can best be administered by the state. In our own country the postal system is the best illustration of this class of activities. In carrying out its positive function, it is the duty of the state to take over to itself only those functions which can best be administered by all of society acting through its officials, and then to carry out such functions for the benefit of the whole people. The state should not enter upon fields in which individual initiative, acting under regulations set by the state, can equally well carry out the function. In cases, however, where the state cannot well set the limits for individual or corporate activities, or cannot enforce its regulations, then the state should manifestly take over the activity to itself.

Under the older régimes, before the individual and society had risen to full self-consciousness, there was little

Relation of the individual to the state. opportunity for the individual to participate in the affairs of the state. The state

has responded to the universal movement toward social and political democracy, however, and is to-day essentially what it is made by the participation of its members. The participation of the individual in the affairs of the state is of necessity of a much more general and indirect nature than his participation in the smaller and more compact social institutions. When right relations exist between the two, the individual hardly feels the yoke of the state's authority; the different projects of the state are directed by persons for the most part unknown to the individual; and his own voice in the state's affairs is expressed through representatives chosen for this purpose. The ballot is the individual's sole means of

exerting his influence in the control of the activities of the state, and the immediate effects of the ballot are sometimes hard to see. The result is that the individual not infrequently loses sight altogether of his own power and authority, and either fails to use the ballot or else uses it carelessly or for his own personal ends.

Political democracy is more than a *modus operandi* of government; it is far more than a piece of legislative and

The spirit of democracy. administrative machinery. Democracy is an expression of the worth and intelligence of the individual; it is a spirit, a standpoint, a confession of faith in the ability of society as a whole to govern itself. Democracy assumes that the citizens of the state shall possess the intelligence, the public spirit, and the ethical standards which will prompt the individual faithfully to do his share in shaping the activities of the state for the common good. Let the individual fail at any one of these points and the foundations of democracy begin to weaken.

Ignorance, selfish indifference, and low ethical standards are, therefore, the three great foes of representative

Great foes of democracy. government. The state must, in sheer self-defence, protect itself at these points. It must see that its citizens are educated, that they possess the spirit of patriotism, and that high ethical standards are put at a premium.

Education is, therefore, in a very immediate and vital way, one of the first concerns of the democratic state.

Education a chief concern of the state. An educated citizenship is a bulwark of safety and a national asset. The money spent on schools is returned a thousand-fold to the state in the form of intelligent participation in its activities and sympathetic understanding of its

purposes. The state could without doubt expend with excellent returns to itself much more than it is now putting into our public schools. The four hundred millions which we are now expending annually for public education looks like an immense sum, yet it is not more than one-half what is needed to put school support on an adequate basis. Nor does this sum seem such a drain on our national resources when we consider that we annually expend fully two and one-half times as much for tobacco, and five times as much for liquor as for the current expenses of our public schools.

It is axiomatic that education in a democracy must be universal. The state has a right to compel its citizens

Is American education deficient? to become educated to the degree necessary to make them safe and desirable citizens.

Most of our commonwealths now have compulsory education laws looking to this end. Much still remains to be desired in this connection, however, as is shown by the fact that the average age of quitting school in this country is about twelve years; the average period of school attendance is a trifle over two full years. As long as these conditions obtain, we can hardly claim an educated citizenship; for children under twelve years cannot be adequately trained for citizenship, and especially is this true if their school attendance is limited to two years.

But, dangerous as is ignorance to the life of the state, it is probable that indifference to the obligations of ci-

Danger from political indifference. zenship are a still greater foe to public safety. If all the well-disposed citizens of the country were to take a part in the political affairs of the state perpetually, omitting neither caucus, nor primary, nor convention, nor polling place,

the control of the political boss and gangster would speedily come to an end. For nearly always, in the case of a battle between the forces of corruption and the forces of decency, the stay-at-home vote holds the balance of power. And the stay-at-home vote does not consist of the forces of corruption, but of decent citizens whose selfish interests or lack of public spirit keep them from the polls.

Political ethics is undergoing a radical reconstruction in this country at the present time. Graft and corruption practised in high places have born fruit in petty graft and corruption in small matters. Legislative votes cast not in the interest of public welfare but to support special privilege have had their counterpart in votes sold for a pittance at the polls on election day. The selling of the franchise for money or preferment has reached alarming proportions in many parts of the country. This practice strikes at the very centre of national life through corrupting the morals of its citizens. But the civic conscience is awakening; bribery and corruption are being uncovered and punished; public office is coming to be a public trust, and official responsibility an opportunity for social service.

The educational aim must include the state. Education has no higher aim than the preparation of youth for efficient citizenship. This aim must include not only the training of the intellect, but also the inculcating of an unselfish and aggressive patriotism based on high moral and ethical standards.

VI. The School as the Instrument of Education

The school is the one institution that belongs exclusively to the child. Not only did the needs of the child originally call the school into being, but they also constantly must determine its character and activities. The school differs from the other social institutions in that its function is more sharply defined and its activities more narrowly limited than theirs. The home, for example, has many functions, among the chief of which are the biological, the economic, and the social. The state carries out a vast number of different lines of activity. But the school has only a single function—that of educating children; hence all its activities are concerned with this one end.

Society has evolved the school as the means through which to attain its educational aim, the specialized instru-

The school as an education factory. ment for transmitting its culture and ideals to the new generation. Our schools may be looked upon as a great system of education factories in which the children are both the raw material and the workers. The curriculum, equipment, and organization are the tools used in the process by which the child is made over into an active, efficient, contributing member of society. The teacher, through his management of the school, through instruction, and through the influence of his personality, supplies the most favorable conditions possible under which the child is to work.

The problem in the school, as in any other factory, is to secure the largest output with the least waste of material and labor. On the one side, society expects in return for its outlay

Demands upon the school.

men and women vitalized by contact with the choicest in the race's thought, feeling, and achievement, and made ready for efficient participation in social activities. On the other side, the individual looks for the fullest possible development of his powers and capacities in a significant and growing experience which forms an integral part of the broader social experience which constitutes his environment.

Waste in education is hard to measure. There are no standardized units in which to sum up educational growth and development. Furthermore, influences entirely outside the organized activities of education are operating on the life of the child, and forces within his own nature are ripening wholly irrespective of the school. The ultimate test, that of efficient participation in the social process and continued personal growth, is long delayed. While results are therefore not only the theoretical but the final test of any system of schools, results are so hard to measure and so long in coming that they are not a serviceable measure of the success of any particular school.

The best test of a school is its *activities*. What is *going on* in the school? Are the pupils there regularly?

Are they spontaneously employing their powers? Is the work they are doing significant because related to the permanent and fundamental interests that are dominating their lives? Is the organization of the school such as to stimulate the social impulses and develop ethical impulses and control? Is the curriculum vitally related to the social process of which the children are a part? Is the teacher a worthy representative of social culture, inspiring in his personality and professionally equipped for his work?

If such questions as these, dealing with the activities of the school, can be satisfactorily answered, there will be little occasion for concern over the quality of the output, or over the question of waste in the education factory.

Measured by the standards just stated, there are certain sources of waste in our present system of schools that should cause us grave concern. First of all, our children do not continue long enough in the schools. There is too much leakage between grades, too much waste of opportunity. Professor Thorndike has shown that,¹ for all cities of 25,000 and over in the country, out of every 100 children who enter the first grade 10 have dropped out before reaching the fourth grade; 19 before reaching the fifth grade; 32 before reaching the sixth grade; 46 before reaching the seventh grade; 60 before reaching the eighth grade; and 92 before reaching the twelfth grade. This showing is undoubtedly better than would hold for the entire country. This means that only 40 per cent of our children are receiving a common-school education and 8 per cent a high-school education. The average age of leaving school is about twelve years, after an aggregate attendance of slightly more than two full years. We can hardly hope to train to intelligent and efficient participation in a democracy under these conditions.

Further, there is a great waste from irregular attendance. An industrial concern would hardly think it possible to run with from a quarter to a third of its operatives constantly idle. Yet this is what we do in the schools. The average daily attendance in some States falls as low as 65 or 75 per cent of the registration. Of course a perfect

¹ Bulletin of United States Commission of Education, No. 377.

percentage of attendance cannot be expected, but school-going is hardly yet considered by many as a business which needs the same regularity as any other business.

Probably, however, the greatest source of waste in our present schools is in the teaching. We have not yet

Waste through poor teaching. as a nation learned the economy of expert teaching. Our standards for entering the vocation are low, and the professional requirement of those in the work almost negligible. Teaching is gradually being given over into the hands of women, there being now slightly over twenty per cent of men in the work. The compensation is hardly sufficient to warrant men to accept classroom work as a life occupation except in the larger cities. It is not unusual for pupils to pass through the entire twelve grades of the public school without having any instruction under a man teacher.

It need hardly be explained that no criticism is intended on the value and ability of women as teachers.

Teaching mostly by women. But both men and women are needed in the school, as in the home. Further, it is impossible to develop a professional spirit

and technique when the term of service in the vocation is short; and the proportion of women engaged in teaching materially shortens the tenure in the work. For women will not, and should not, look upon teaching as a life work. Their career ultimately lies in the home, and there most of them are to be found after a year or two in the schoolroom.

From the nature of its origin and its function, the school is the complement of the other social institutions. In primitive societies, no schools are needed, for the home,

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the state, and the church, being simple in their organization and function, are able to take care of the instruc-

The school a supplement to other institutions. tion of the child in all the lines necessary for efficient participation in the life of society as then organized. But, as life grows more complex, two changes take place in this re-

lationship; the institutions themselves find their activities so multiplied that they have not the time for teaching the young, and the educational demands grow so complex that only an institution giving all its time and attention to the work of education, and organized with this specific end in view, can carry out the work of teaching the young. For example, in primitive societies the home is able to instruct the child in all that is needed of the simple arts and crafts required to fit the individual into so elementary a social process. But as social interests multiply, and as the home itself takes on many new functions growing out of the more highly organized social life, it finds the educating of children far beyond its power.

Likewise, in the early state, the duties of citizenship were taught the young men by the chieftain of the tribe and fully exemplified by him in their presence in the hunt or on the war-path. But as the simply organized tribe grew into the complex state with its citizens numbered by millions, it manifestly became impossible to train for citizenship in any such way.

The early church made it an important part of its function to instruct its members, and particularly the young, in the principles of religion, and in the creed and technique of the church. In the United States, this function still rests with the church, with whatever help can be had from the home. In England, France, and Ger-

many, however, instruction in religion is a regular part of the school's function.

The school has, therefore, arisen out of very immediate and concrete social needs. At the time of its origin, it

The school must keep close to social needs. took over a set of very necessary functions that the other institutions found themselves unable successfully to carry out. It had

no doubtful or distant aim. It responded fully to the social demands and purpose. There was no danger of a divorce of the educational aim from the social aim; for they were one and the same. The great problem of the school at all stages of its development is to maintain this immediacy of response to social needs and the social aim. That it has not been able to do this at all times is not strange; for social needs and the social aim are not always easy to interpret. But that the school should be allowed to continue out of harmony with society would indicate that society has not yet been able to select, organize, and administer a means of carrying out its aim.

While the school has so important a set of functions, it may nevertheless be questioned whether the other

Is too much demanded of the school? social institutions are not expecting and demanding too much of the school; whether they are not making the school a dumping ground for activities in which they themselves are failing or which they are shirking. Homes that are not able to control rebellious or wayward children not infrequently turn the problem over to the school with a sigh of relief, expecting the school to *reform* where the home was unable to form. Or other homes in which an atmosphere of bickering and fault-finding prevails, and in which the rules of common courtesy and politeness are constantly

violated, expect the school to train the child to gentle conduct and a responsive disposition.

Similarly the community not infrequently works at cross-purposes with the school in requiring that the school

The com-
munity and
school may
work at cross-
purposes.

teach children the principles of hygiene and temperate living, and at the same time offers for sale tobacco and cigarettes to school children and tempts them by saloons and worse dens of vice.

The school is expected to instruct children in the laws of health and how to avoid diseases whose communication and progress are due to lack of cleanliness or reasonable caution. Yet schoolrooms themselves are not always clean and well ventilated; the common drinking-cup is yet common; food that has been exposed to the dirt and dust of the street or store is daily sold for food.

The state demands that the school shall teach the principles of good citizenship, honesty, patriotism, and obedience to law.

Similarly the state. Yet there are many undesirable citizens among us; honesty is not yet the established rule among all citizens; there are those that put private interest above patriotism; and not a few law-breakers go about among us unpunished.

Of course, it is not to be expected that the home, the community, or the state will be perfect any more than

All institutions should assist in educating the child. that the school will be perfect. And the fact that the other social institutions are not fully meeting their problems does not imply that the school shall be indifferent to the demands placed upon it. The problem of educating the child is a common problem. All the institutions are involved in it. The school cannot do it all. The other

institutions must do their part and furnish an atmosphere that is not only not hostile to the work the school has set for it to do, but an atmosphere that renders the work of the school more easy and fruitful. Team work among the social institutions is the first requisite in the education of the child.

REFERENCES

On institutions in general: Addams, *Democracy and Social Ethics*; Bagley, *Educative Process*, ch. II; Bosanquet, *Philosophical Theory of the State*; Chancellor, *Motives, Ideals and Values in Education*, ch. II; Coleman, *Social Ethics*; Dewey and Tufts, *Ethics*, part III; Henderson, *Social Elements*, part III; Rüdiger, *Principles of Education*, ch. XIV.

On the home: H. Bosanquet, *The Family*; Dewey and Tufts, *Ethics*, ch. XXVI; Eliot, *American Contributions to Education*, ch. V; Parsons, *The Family*, chs. XIV, XV; Saleeby, *Parenthood and Race Culture*; Small and Vincent, *Introduction to the Study of Society*, books III, IV; articles by Talbot, Sumner, Gilman, Henderson, and Morrow in *American Journal of Sociology*, vol. 14.

On the community: Small and Vincent, *Introduction to the Study of Society*, book II.

On the church: Brown, *Social Message of the Modern Pulpit*; Caird, *Philosophy of Religion*; Coe, *Education in Religion and Morals*; Commons, *Social Reform and the Church*; Gladden, *The Church and Modern Life*; Henderson, *Social Duties*; King, *Theology and the Social Consciousness*; Mathews, *Social Teachings of Jesus*; Peabody, *Jesus Christ and the Social Question*; Starbuck, *The Psychology of Religion*; *Education and National Character*, published by The Religious Education Association; articles by Judson, Cochran, Kerby, Evans, Simkhovitch, Mangold, and Allen in *Annals of the American Academy*, vol. XXX.

On the State: Bosanquet, *Philosophical Theory of the State*; Hill, *World Organization and the Modern State*; McKechnie, *The State and the Individual*; Willoughby, *Nature of the State*.

On the school: Chancellor, *Our School*, ch. II; Dewey, *The School and Society*; Dutton and Snedden, *The Administration of*

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Education in the United States; Eliot, *American Contributions to Education*, ch. VIII; Gilbert, *The School and Its Life*; Hanus, *A Modern School*, ch. V; Henderson, *Principles of Education*, chs. XV, XVI; Jenks, *Citizenship and the Schools*; King, *Social Aspects of Education*; MacVannell, *Philosophy of Education*, ch. X; Scott, *Social Education*; Spencer, *Education*.

CHAPTER VI

EDUCATION AND VOCATIONAL MODES OF EXPERIENCE

I. Vocations as a Mode of Social Evolution

All human progress rests on toil and sacrifice. It has been so from the beginning and will be so till the end.

Work at the basis of all progress. Man early learned that only by the sweat of his face should he eat bread. He quickly

outgrew the nomadic impulse that led him to wander about, living precariously on the gratuities of nature obtained from the chase or the untamed fields. He settled down and became a worker. He became the master of his environment and made it yield to his comfort and advancement. His mastery gave him a sense of power. He became provident, and was no longer dependent on the accident of season or the supply of game for his food. The rigors of climate have no longer any terrors for him. He has emancipated himself from the grip of circumstances and become a ruler in his domain through work.

Once having learned to work, man makes this his chief business. He tills the soil until it yields every manner

Man a worker. of fruit. He takes the iron from the mine, the wood from the forest, and the clay from

the hill-side and makes them into homes, factories, and cathedrals. He harnesses the rivers, tunnels the mountains, and bridges the oceans for his commerce. He pries out the secrets of nature and develops science.

He immortalizes his hopes, his aspirations, and his sufferings in literature and art. Man is patiently climbing upward and is carrying his environment with him. Work has been the greatest formative influence in his evolution; it is the means by which he has created civilization.

At first man's work was heterogeneous and unorganized. Each was his own butcher, baker, and candlestick-maker. But, finally, both personal choice and economy of effort led to division of labor. One man became a tiller of the soil, another became a miner, another a fisherman, and so on. Vocations were having their rise. And the process of subdivision has gone on until an astonishing degree of refinement has resulted. Each worker must now develop a very high grade of skill in a narrow field. The Jack of all trades finds no place in the world's work under modern conditions. The day of specialists is here.

There are many vocations, but man's needs lie at the centre of them all; hence they are all interrelated. Indeed, social unity and interdependence are nowhere better illustrated than in the vocations. Let the railway workers strike, and a city goes hungry. A season's crops fail, and business and the other industries feel the stringency. A score of vocations unite to set our breakfast-table, and half a hundred men working a thousand miles apart join hands in supplying us with a suit of clothes. The scientist is helpless without the skilled mechanic to construct his instruments and machines, and both pay tribute to the farmer, who in turn profits by the work of the scientist and the inventor.

Men work for two very good and sufficient reasons: first, because they have to, and second, because they desire to. Both economic and social necessity, as we have already seen, spur men to labor. He who will not work may not eat, and neither will he stand well among his fellows.

**Vocations
a universal
mode of
experience.** Man is too great to be satisfied with mere dawdling or the expenditure of his powers on the trivial and inconsequent. He is at his best only when some great purpose demands all his energies in fruitful toil. Vocations constitute, therefore, a universal mode of existence. The only exceptions are to be found at the two opposite poles of society, and both are equally abnormalities and in the way of progress. The one is the vagabond, lacking in initiative and too lazy to provide for himself by work; the other is the rich idler, also lacking in initiative, and too lazy to work when not compelled to provide for himself. Not only are none so useless, but none are so devoid of interest and incentive as those who have nothing worthy to do.

**Fundamental
groups of
vocations.** The many vocations that have been differentiated in the evolution of the social process can be grouped in a few broad typical lines. Each of these lines represents some one great field of human needs which it supplies, and all together unite to form one of the strongest unifying principles of society.

II. The Industrial Vocations

The industrial pursuits, such as agriculture, mining, and the trades, are the oldest and most fundamental of all the vocations. Man's first necessities are material;

he must have food, shelter, and clothing. All the institutions, indeed the entire social fabric, rests on an economic basis. Leisure and the opportunity for education and the refinements of life are based on some one's productive toil. All who study, or teach, or write, or paint pictures must have some other members of society supplying them with the necessities of life and the materials that go into their work. In former times this was accomplished by slaves, who were looked upon as extra-social, and hence possessed of no rights of their own.

But with slavery gone, and the industrial workers constituting one of the most important groups in our democracy, the problem changes. It now becomes the aim so to utilize scientific methods of production in the industries, and so to train the worker in the use of his powers and the technique of his labor, that the largest possible output shall result from the expenditure of time and effort on the part of the worker. For the less of human energy it is necessary to put into the economic basis of life, the more there will be available for other lines of progress and for a broader development of the individual.

Therefore, the man who, through better conceiving his work, or better training himself for it, or by inventing

improved appliances or methods, can make two blades of grass grow where one grew before is a benefactor of his race. He is in so far a creator, and is fulfilling a function than which there is none higher. He is ministering to one of the most immediate and fundamental of human needs and is himself in contact with the deepest realities of experience.

It is this fact that gives labor its dignity and makes productive toil a contribution to human progress.

Society has been slow in including the industrial occupations in its educational aim. In fact, it has been

Educational
aim slow to
include
industrial
vocations.

rather the fashion in certain quarters to decry as spurious all education that is "practical" in the sense that it touches the industrial activities. It is true that the

old-time guilds opened schools for their apprentices in which they were given training in their vocation. But when the state took up education, this type of training was for the most part omitted. In recent times, Germany, England, and France have seen their mistake in the matter of industrial education and have made this an integral part of their school programme. Until recently it has been one of the anomalies in our own educational system that in many States the only industrial education offered at the expense of the state was in the *reform* schools. But the social demand that industrial training shall form a part of general education has become very insistent and all but universal. The schools are responding to the demand and the programmes are being reconstructed to include this work. In addition, many municipalities are now establishing special trade schools in which a thorough knowledge of, and skill in, the industries may be obtained. Not only is agriculture being introduced into the common schools in many States, but special schools and courses are being organized throughout the land.

Division of labor
causes loss of
interest.

One of the most significant facts in modern industries is the division of labor with its high degree of specialization, and the introduction of machines to do the work formerly done

with hands. So far as the activities involved in the actual labor itself are concerned, it seems inevitable that the individual must be the loser by the change. For it is hard to maintain the same interest in the work of daily smoothing the edge of hundreds of shoe heels at a machine that attached to making the whole shoe when this was done by hand. The acts that go into the labor become automatic and less of the self is called forth. The worker tends to become a machine.

Proper adjustment to this phase of the industrial situation requires that the worker shall apply his interest

Adjustment necessary. and initiative toward making himself the most expert specialist possible in his narrow field.

In this way he will find satisfaction in his labor and will also increase his production as measured per unit of time and effort. As a compensation for this increased productivity he must himself receive better hygienic, social, and moral conditions under which to work. He must receive larger pay in order that his standard of living may advance. And he must work fewer hours so that he may have time for recreation and self-improvement.

It is imperative that the problem of a better adjustment of the industrial workers to changed conditions in

Problems pressing for solution. modern industries shall be worked out, and that this group of vocations shall receive their share of the advantage that has come

from the more efficient modes of production. For it matters not how loud the roar of our factories, how long our railroads, or how high our buildings if human life is being degraded or left undeveloped in the process; the result cannot be progress. The greatest wealth of society is after all her men and women. A

worthy and permanent civilization cannot be built on industrial slavery or injustice.

III. The Business Vocations

Necessary as are the industrial vocations, the industrial workers alone, functioning solely as producers in the industries, could never build a complex civilization. Crops must be raised, but grains must also be distributed to the world's markets. Iron must be dug from the mine, smelted, and made into machines, but this can best be done on a large scale and with an organized system that requires minute division of labor and the use of much costly machinery.

The business vocations stand for the organization and direction of industrial energy, and for the application

Nature of business vocation. of capital toward making the effort expended in the industries more productive.

Factories are set up, transportation systems put into operation, efficient methods of exchange devised, and all the rest of the vast machinery of the production and distribution of wealth co-ordinated and made effective by those acting in the business vocations.

Through the introduction of labor-saving machines, the application of more efficient methods of manufacture,

Common interests of capital and labor. and, above all, through skilful organization and management in the field of production and distribution, the business vocations have

doubled and trebled the value of human energy as applied to the industries. Business workers are therefore as necessary in any highly organized society as are industrial workers, and each group supplements the activities of the other. There can be no fundamental

antagonism between the interests of the two classes. The struggle that is being waged between labor and capital does not grow out of a conflict that is inherent in their relations, but out of class blindness and selfishness and social malorganization.

The business occupations differ from the industrial in affording greater opportunities for the satisfying of certain instincts for competition and conflict. In his evolution, man has come up through ages of fierce struggle, and these experiences have left in him the love of a contest. Wars are becoming less common and hand-to-hand conflict is wholly tabooed. But the contests of the modern business arena supply an outlet for these fighting tendencies. They lack nothing of the cunning and but little of the ferocity of the earlier combats with the enemy in the forest or on the battle-field. In the fierce struggles on the board of trade little quarter is asked or given.

The problem of the business vocations is a double one. Its first aspect is so to adjust the relations of business to the industries that the industrial workers shall not be exploited for the advantage of capital. It is true that, on the whole, the business vocations engage a higher grade of intelligence and education than the industrial occupations and can therefore justly claim larger rewards for their workers. The inherent selfishness in human nature has, however, impelled business to take more than its fair share of the joint product of the two vocations. Great masses of industrial workers have been exploited to enrich business and have themselves been reduced to the lowest living wage. This has precluded for a large proportion of the

Differences
between
business and
industrial
vocations.

Problem of
the business
vocations.

industrial workers not only all the luxuries and refinements of life, but in many cases nearly all of its comforts and many of its necessities as well. Such a situation is a source of constant strain on the social bond, and a serious barrier in the way of social progress.

The second phase of the problem confronting the business vocations is concerned with a change in the direction of the conflict involved. Conflict there will continue to be, for a large part of the satisfaction in business comes from the game itself. But the better part, at least, of the impulse that prompts to combat can be satisfied in other ways than in slaughtering one's competitor in the commercial arena. Man's best powers are yet challenged by projects for more efficiently utilizing natural forces and resources, and he needs still to grapple with the difficulties involved in the better organization and management of business enterprises. Business energies directed in these lines will still result in pitting man against man, but the conflict will be indirect, and neither will need to fail in order that the other may succeed. Competition in these directions results in the enrichment of society and the impoverishment of no one.

The educational aim cannot ignore the business vocations, for their relation to the social programme is very vital and their functions very important. Every individual is in some degree a business man. He must help organize and carry on the business of a home, a shop, a farm, a church, or a state. Therefore general education should take into account the business side of social activity and furnish training in the elements of business law, the forms and usages of commercial paper,

**The educational aim
must include
business
vocations.**

and the technique of ordinary business operations such as are required by those engaged in other than business occupations.

The principles underlying the organization and management of business enterprises, and the technique of the activities involved in them, are becoming well enough known so that we are approximating a science of business. This means that those who are to enter upon business vocations should have the opportunity for special educational preparation in these lines. Business education has been brought into some degree of disrepute in this country through the so-called "business colleges," hundreds of which purport to give a complete business education in six months. The most that these schools can do is to offer instruction in the incidentals of business; that is, in the details of business forms and book-keeping. While all this is necessary for the business man, this much alone is but a training for clerks and book-keepers. An encouraging tendency is just now observable, however, in the opening of "departments of commerce" in various of the leading American universities, where the underlying principles as well as the method of business may be studied.

IV. The Technological Pursuits

The technological pursuits possess a different, if not a higher, type of interest than the business vocations. It is here that invention emerges, and that force and cunning are applied to material things and not to men. The technological worker sets his task at mastering the materials and forces of nature and subjecting them to his will. He is not in-

**Nature of the
technological
pursuits.**

terested in theories except as they lead to practical results. He fastens upon some bit of truth in the form of a law or hypothesis discovered by the scientist, applies it to the products of mine, forest, and field, and a new machine or a new process is the result. In order successfully to carry on his work, he develops a remarkable degree of skill and refinement of technique. And where his hand, because of its natural limitations, is unable to carry out his wish, he just constructs another instrument and turns the work over to it.

On the social side the contribution of the technologist is in the direction of making our world more habitable.

The contribution of the technologist.

The discoveries of science are applied to the vocations, making them more productive, and invention not only makes work easier, but also supplies many appliances that add immeasurably to the comfort and breadth of life. The technological worker, while he is dependent on the industrial vocations for his materials, on the business vocations for the financing of his projects, and on the scientist for much of the knowledge that he utilizes, is the actual and immediate creator of the material side of civilization. It is from his hands directly that we receive the finished product that adds to our convenience or luxury. It is through his work that electricity is harnessed and sent on our errands, or made to light cities and run our cars; that Niagara is belted to dynamos and made to become a source of power as well as of wonder. Steam is made into a slave, and the ocean becomes a highway. Buildings are erected that tower a tenth of a mile in the air and house comfortably and hygienically under one roof more people than live in an average village. California is brought nearer to New York than Boston was to Philadelphia in the older

day, and the whole habitable world is welded into one great family by the telegraph, the cable, and the newspaper.

In return for the materials that he receives from the industrial workers, the technologist originates inventions and machines that multiply many times the efficiency of industrial labor. He gives back to the scientist in return for what he borrows from him the telescope, the microscope, and a thousand other machines and instruments indispensable in scientific research. In like manner this debt is paid to each of the vocations.

So important has technology become in our modern life that education has seen the necessity of incorporating

Technology and the educational aim. it in its aim. The highly specialized skill and trained technique required in technology cannot be secured without specially organized schools possessing extensive equipment and affording expert instruction. Lack of technological education leaves a nation at a disadvantage in two important particulars; first, the lack of skilled workmen makes it impossible to compete successfully with the foreign nations which have trained workmen; second, lack of skill and efficiency in production results in waste of natural resources.

The United States, possessing seemingly inexhaustible resources, and capable of producing great wealth with

The United States behind in technological training. little effort, has been slower than Europe in seeing the need of the technological as one of the aspects of public education. Germany, England, and France, being less favored than our own country, and having a denser population, have been forced to use every means of increasing the efficiency of production. Hence, in

these countries technological education is much farther advanced than with us. The indications at present are that the American people are awakening to the part that technology plays in the social process and will provide for this type of education.

V. The Scientific Pursuits

The scientific pursuits are dictated by still another type of interests. In these the play of mind has come to be an end in itself. Genius and cunning are pitted against the Great Unknown. The universe of law and matter challenges the mind. Man accepts the challenge and is slowly but surely unravelling the secrets of nature. The scientist as such is not concerned with the practical application of the truths he discovers. To be sure, he knows that all truth is valuable and in the end related to human experience, but he leaves the application to others. Truth for its own sake becomes his motto. Research and investigation become a game, with some new bit of truth the stakes. The "pure sciences" are the result.

In a less highly differentiated society, the scientific pursuits, concerned as they are with the accumulation of truth rather than with the question of its bearing on the immediate affairs of men, would have little direct value. But with our present degree of differentiation, there always stands ready the technological and the business vocations waiting to make serviceable to the immediate needs of society what the scientist discovers.

Contributions of science to social progress. The value of the contributions of the scientists to social advancement cannot be computed. Not the least of the contributions of science is the method that it embodies. The sci-

entist is pre-eminently an investigator. He seeks first of all the facts and desires them at first hand. He subjects all authority and tradition to examination and test. He undertakes to prove all things that lie within his field and holds fast only to that which he can prove. This method and attitude have come in large degree to prevail in all lines of modern thought. Nothing is too trivial or too sacred to be subjected to investigation and verification. This critical spirit has undoubtedly resulted in some loss of reverence and respect for many of the older concepts; on the other hand, it has made the concepts that have stood the test more vital in relation to experience.

Science has freed us from the reign of superstition. Through the discovery that all nature has been evolved

**Science frees
from super-
stition.** and continues to operate in accordance with all-inclusive law, we no longer believe in signs, omens, and portents; hence, we are no longer under their tyranny. Eclipses are not animals eating up the moon and to be frightened away by much noise and shouting; pestilence and disease are not a visitation of Providence indicating His displeasure with our conduct, but are a result of our carelessness and disobedience to natural law; poverty and crime are not to be taken as a matter of course, but are the result of discoverable and in some degree preventable causes.

**Science
contributes
to the arts.** Through the discoveries of the scientist, the length of human life is being greatly lengthened and the ravages of sickness and disease much reduced, thereby effecting a great saving, both economically and socially, and also in unnecessary sorrow and suffering. Science teaches us how to conserve our natural resources; how to get the most out of the soil, the mine, and the forest without

exhausting their treasures; and how to manufacture our products with the least waste of material and energy. It is science that is giving us mastery of our environment, and hence control over the processes of our own experience.

Science has come to play a large part in the educational aim. No country has to-day a school curriculum that

The educational aim responsive to science. does not provide for science as one of the branches of study. While science has therefore become a part of general education, this does not mean that the schools shall train to the vocation of the scientist. The scientist requires a high degree of skill and the technique of his special field. He must have thoroughly at his command the discoveries and inventions applying to his work and must possess a broad and accurate fund of information bearing upon his problems. It is therefore evident that the scientist must be trained in a specially fitted school or department which is fully equipped to put him into possession of these requisites.

VI. The Professional Pursuits

The professional pursuits belong to a relatively advanced stage of social development. They have their

Place of professional pursuits. origin in the necessity for meeting crises in experience. Primitive man did not trouble himself about laws of hygiene, medicine, or surgery until he met with an accident, or until sickness came; then he sent for the medicine man. Similarly, when the run of experience was smooth and undisturbed by trouble, man felt himself sufficient in his own strength; but when crushing sorrow came upon him, or eternity opened out before him, he sent for the

minister or the priest. The lawyer was employed only when one was caught in the meshes of the law. The teacher was called in chiefly to prepare his pupil to meet some emergency, like preparing for a vocation, acquainting oneself with the capital laws of the land or with the doctrines of the church.

Both society and the professional class, however, are coming to see that the highest function of these vocations

Changing attitude toward professions. is to prepare so to meet the various experiences of life that the great crises shall not arise as threatening catastrophes. The

physician is coming to conceive his function as being far more than that of teaching people how to keep well than to cure them after they have become sick. He sees the greatest victories ahead for his profession in the field of hygiene and preventive medicine, rather than in remedial medicine. The minister and the priest are no longer thought of as a source of help when death threatens, but as moral and religious leaders who shall so teach to live that sorrow and death may no longer be the great crises to which the individual is unable to adjust himself. The lawyer does not find it his chief business to plead cases in court, but so to help in the making and interpreting of wise laws, and so to counsel his clients that lawsuits shall not be necessary. The work of the teacher is coming to be conceived as the training of his pupils in the habit of meeting and adjusting themselves to crises and emergencies so that they may develop the power to control their own experience under these conditions.

Professions require special training. From these considerations it follows that the professional class must be a class of specialists, both as to their functions and their training and methods. They are leaders, and their

education must be of a highly concentrated and intense character. And, in order that this may not make them narrow, this specialized education must have as its foundation a broad and thorough general education.

The educational aim must include the professional vocations. The carrying out of this aim requires special schools of very high type. This demand is being met by the organization of schools of medicine, law, theology, and education in connection with most of the great universities. The profession of education is the newest of the professions, if indeed it should even now be called a profession. There are some reasons for thinking that teaching can never be as closely organized and highly specialized a profession as medicine, law, or theology. Among these are the uncertainty of tenure of position and the meagreness of compensation. Another is the large proportion of women in the vocation, most of whom remain only a brief time, and hence can never catch the professional spirit. Yet the work of the teacher is, on the whole, becoming more standardized, the professional spirit is developing, and education is gradually earning the right to be classed as a profession.

VII. The Vocation of the Artist

The artist's vocation deals not with the creation of values, but with their expression. The artist must first of all be a man of vision, one who is able to weigh values, and he must then possess the skill that will enable him to put these values into simple and beautiful form. He looks out upon life, the manifold life of the race, and seizes upon

*Work of
the artist.*

the greatest concepts, the most vital experiences, the strongest motives. These he crystallizes in a picture, a statue, an epic, a cathedral, or an oratorio. Through the clearness of his vision and the skill of his technique he is able to express his ideal so clearly that even he who runs may read. In this way the great concept or motive, or whatever has constituted the ideal of the artist, is brought clearly to the social consciousness and made the common property of the race.

The artist is pre-eminently a seeker after truth, beauty, and goodness in their highest form. He subjects the experiences of men to analysis and sets out certain phases to stand as types for man in his striving. He selects from among many values those that he conceives as most worth while. These he is able to emphasize by clothing them in forms of beauty and harmony, to whose appeal man always responds. The artist is therefore an influential leader and teacher. Upon him rests a great responsibility. Raphael's ideal of motherhood and childhood has set the standard for millions who have looked upon the "Sistine Madonna"; and Leonardo's "The Last Supper" reveals as much of the character of Jesus as do the Gospels.

Artists of the highest type, like other geniuses, are undoubtedly born, and not made. Yet there is much of the art impulse in all of us, and the development of this impulse should form an important part of the concern of education. Not only is this necessary from the fact that an opportunity to express the artistic impulse at the right time would undoubtedly discover to themselves many excellent artists who otherwise would never know of their powers,

*Relation of
art to the edu-
cational aim.*

but also because all need to cultivate a knowledge of art and an appreciation of its values. While the public schools cannot teach the highly perfected technique of the artist, they can cultivate the power to understand the work of the artist and the desire to express its great ideals in their own experience.

REFERENCES

Bucher, *Industrial Evolution*; Carlton, *Education and Industrial Evolution*; Davidson, *Education of the Wage-earners*; Davenport, *Education for Efficiency*; Dopp, *The Place of Industries in Elementary Education*; Gillette, *Vocational Training*; Hall, *Youth*, chs. III, IV; Haney, *Art Education in the Schools of the United States*; Hanus, *Beginnings of Industrial Education*; Herrick, *Commercial Training*; Ward (editor), *Social Ministry*, chs. V, VI; *Annals of the American Academy* (number on Industrial Training,), vol. 33.

CHAPTER VII

EDUCATION AND AVOCATIONAL MODES OF EXPERIENCE

I. The Place of Avocations in the Social Process

In apposition with vocational modes of experience must be placed the avocational. As society grows in wealth and economic pressure lessens, leisure begins to play a more important part in the social process. Avocations are as much a matter of social concern as vocations. For it is almost, if not quite, as high an art to use one's leisure time well in his avocations as to employ his work time well in his vocation.

To prove the truth of this statement, one has but to witness the large number of people to whom freedom from toil means liberty for the indulgence of low tastes and bestial impulses in some sensual orgy. Such a use of leisure as this is a menace to society, for it breeds debauchery and crime; it is a menace to the individual, for, instead of recuperating his strength and renewing his courage, it saps his energy, lowers his tastes, and sends him back to his work depleted physically and depressed mentally.

Nor is the unwise and unprofitable use of recreation time confined to this class alone. Many persons to whom such low forms of amusement would be repelling, fail, nevertheless, to employ their leisure from work in such a way as to restore reduced physical and mental power. It is entirely

possible for diversions, wholly innocent in themselves so far as moral wrong is concerned, to result in a drain upon nervous energy, or in a dissatisfaction with the routine of daily work, and thereby prove a hindrance instead of a help to the individual.

The difficulty cannot be solved by depriving of the time for leisure. The impulse to recreation and play is deep-seated in the race, and the individual cannot be robbed of the opportunity for its expression without grave injury to his development. The prematurely old children, with their dull and lifeless faces, who may be seen pouring from the factories where child labor is employed, are tragic proof of this statement. If we trace back the history of the dull and brutish men of to-day, we almost invariably find that they were the playless children of yesterday.

The physical necessity for recreation is indisputable. The child needs to play in order to develop his brain, promote bodily growth and vigor, and secure muscular control and co-ordination. His only way of gaining energy is through spending it, and his only way of becoming master of his body for the more serious business of life is through using all its powers in the unrestricted activity of play.

The adult needs the change and rest that come through avocations hardly less than the child. The fagged brain and listless organism are the result of running too long in one groove, of playing too steadily upon one string. It is not work, but unremitting work, that kills. If between the ages of twenty and seventy years a man is to work forty years and rest or play ten, he should not work steadily from the time he is twenty until he is sixty and then drop all

occupation and spend the remainder of his days in idleness, being, as Browning puts it, one

“Whose lot is cast
With those who watch, but work no more,
Who gaze on life, but live no more.”

The better plan is to distribute the rest-time of life throughout the working period as recreation and thereby retain the ability and desire to follow one's vocation till the end.

The mental necessity for play and recreation is no less pressing than the physical. Probably the most rapid

Mental necessity for recreation. progress made by the child in his mental development is during the play years before he has reached school age.

Play, which has been looked upon as an incident, or even as a necessary evil in the life of the child, is one of the most educative factors. Imagination, memory, invention, judgment, and many other of the mental powers are never more vitally and fruitfully trained than in the activities of plays and games. Inhibition, self-control, and co-operation are in constant demand on the playground. Here also crises are met and problems solved that are closely typical of the more serious crises and problems of later forms of experience.

Besides the influence of play in genetic development, its purely recreative function must not be overlooked.

Necessity for relief from routine. The mind demands change of activity and environment. It must get out of the routine of its daily work, no matter how interesting this may be, or stagnation and a decline of mental power inevitably result. It is not hard thinking, but con-

tinuous thinking along the one line that drains mental power. Not inactivity, but intellectual and emotional change is needed; and not change of thought alone, but also a change enlivening the mood. To work without depletion of power, a certain amount of tonic in the form of fun and enjoyment must be had.

Work in most of its forms is in some degree social in its activities, but it is too serious and concentrated when Social necessity for play. not interspersed with play to yield the best results in the training of the social impulses.

It is in the recreative activities that the social nature finds its fullest and freest expression. Only when work is laid aside and people are mingling in their avocations are the social powers at their best.

The child's first touch with the wider social order outside his home is through the medium of the play activities. Play is the greatest socializing influence of play.

Socializing influence of play. Through play he learns the limitation of his personal will and power as opposed to the social will. The force of public opinion is felt, and the child gradually comes to conceive a social order vastly higher and more powerful than himself. Yet, through the common activities of play, he feels himself a part of this social order and participates in it. He finds himself necessary at certain points. He sometimes takes the initiative and plans and commands. He is learning to lead as well as to follow. Out of all these experiences the group spirit is having its rise and the concept of the common good is taking hold. Loyalty develops, and the child is occasionally not only willing but glad to sacrifice himself for the success of his group or team. The social bond grips him, and he learns that the individual must often

give way for the larger good. The child's concept of society is broadening, and he is coming to conceive himself as a part of the greater social process. He is becoming socialized through his play activities.

But it is not the child alone that needs the recreative activities. From one standpoint the adult requires them

Danger of losing the play spirit. perhaps even more. Work tends to sober the individual and make him too solemn and serious. The lighter and more blithesome moods drop out and are lost, and in their stead come a heaviness and dulness of emotional tone, and with this change we feel "that there hath past away a glory from the earth." The social impulses have much to do with keeping the life fresh and spontaneous, and they are sure to atrophy if not used. Many people become so immersed in their work that they forget how to play, and can take no pleasure in any form of avocation. They even forget how to rest, and can only work, eat, and sleep, and then repeat the process until their overstrained powers break down and they must quit. Such persons miss some of the richest and most valuable experiences of life and prepare themselves for a premature and unhappy old age, lacking in interests and barren in resources.

The moral necessity for avocations is as great as the physical, mental, or social. Play is a great incentive to a correct life and a strong antidote for immorality or delinquent tendencies. Morbid and unhealthy states of mind give way before the counteracting influence of play. Moral dangers which threaten youth in periods of leisure and physical inactivity are greatly lessened, if not wholly removed, through the interest, enthusiasm, and physical weariness accompanying vigorous play.

(Moral necessity for play.)

Many cities have found that boys' gangs of predatory or criminal nature are readily transformed into peaceful

Play as a remedy for delinquency. and efficient base-ball and foot-ball teams. Criminal gangs of boys that have terrorized

certain parts of some of our cities have soon been eliminated by the simple expedient of supplying the boys with ample opportunity for games and amusements. A large proportion of our criminals enter upon a life of crime through misdirected energies and impulses, rather than from innate criminal tendencies. Cities are learning that it is both wiser and cheaper to put money into public playgrounds, amusement parks, and recreation centres than into criminal courts, reform schools, and penitentiaries.

Play is not, as many have thought, antagonistic to work. The play impulse and the work impulse are very

Play not antagonistic to work. closely related, and each is the complement of the other. The play activities are the

natural and necessary foundation for the work activities. No one who does not know what it is to work can fully enjoy and profit by play; on the other hand, one who has never known what it means to throw the whole self into free and unrestricted play will find it hard to bring all of his powers to bear upon his work. It is in play that the individual first and most naturally learns to bring the entire self into action, to use the last measure of effort and will-power of which he is capable.

Play trains to qualities necessary to work. Play trains to the endurance of fatigue and the bearing of pain and hardship. It accustoms the individual to be generous in a victory and strong in defeat. It requires personal initiative, quickness of decision, and self-reliance. And these qualities, which are so constantly demanded and

so effectively developed through play, are the ones most needed in vocational life. Nor will proper play create a distaste for work or impatience with its requirements; it will rather send the individual back to his vocation, not only with recuperated powers, but also with new zest and enthusiasm for his work.

II. Classes of Avocations

The many varieties of avocations. Avocations follow almost as many lines as there are varieties of human interests. It is therefore a hopeless task to undertake any complete and systematic classification of them. It will be serviceable in our present study, however, to note a few of the most fundamental groups. Avocations may be roughly grouped into four great classes: (1) *physical*, or those growing out of the instinct for conflict, and involving a large measure of physical prowess, strength, or skill; (2) *mental*, or those involving a contest of mind; (3) *social*, or those resting on the social impulse, and including the various social amusements and diversions; and (4) *incidental*, or those resting on some personal whim, fad, or fancy, and including any line of activity undertaken for diversion.

It is, of course, evident that these groups are not mutually exclusive. Many of the physical avocations require great concentration of attention, mental quickness, and acumen. Mental games usually involve social commingling. The social avocations often demand much physical activity. And the incidental avocations may involve any or all of the others.

The ages of struggle through which man has passed in his evolution have left deeply imbedded in him the

love of physical conflict. Especially when young he craves the opportunity to exert his strength and to show his

(b)

"Physical" avocations. physical prowess and skill. When there is

added to this the competitive element, the desire to beat an opponent, and also the social element, or the desire for the plaudits of the crowd, there is almost no end to the amount of interest and enthusiasm that is aroused. And even when youth has passed and the impulse to physical exertion is no longer insistent, the desire to watch others in games involving combat is still very strong. Hence it is that base-ball and foot-ball games between professional teams often call together thousands of spectators who are not especially interested in one or the other side, but who enjoy the battle. So high does this combative spirit run that the leading foot-ball player or the champion athlete is a far more noted man with many persons than the leading scholar in the land. In intercollegiate athletic contests the enthusiasm reaches such a point that classes are sometimes suspended for a day, and more often might as well be, in order to celebrate a victory over an opponent.

a) The problem of relating the physical avocations to the educational aim is a double one. The first aspect of the

Relation of physical avocations to education. problem is to cultivate and keep alive in the individual the desire for personal participation in physical games.

We have been accused by the English of being a nation of great patrons of physical sports, but poor sportsmen ourselves in physical contests. It is easy to assemble almost any number of people to witness an interesting game, but most of the onlookers never play any games themselves. They attend the game chiefly to satisfy their love of conflict, and, while they may be known as

"Too professional - not enough amateur athletics."

great devotees of physical sports, may themselves be actually suffering for the want of exercise. We are rather given as a people to hiring a set of professionals to play for us while we sit lazily by and watch them. It would unquestionably be greatly better if our sports could be kept on an amateur basis and professional athletics reduced to a minimum or altogether eliminated.

The recent movement toward introducing a broader and more diversified line of physical training and athletics

Physical training and athletics. into the schools and colleges has tended to relieve this phase of the problem somewhat. Physical training and participation in some line of athletics are now required of all students during at least half of the college course in most of the higher institutions in the country. The immediate benefits resulting to health and vigor from general participation in physical avocations cannot be overestimated, and the less direct but no less important effects in developing a personal interest in active participation in games and sports is as great.

(b) The second phase of the problem has to do with maintaining a proper balance between physical sports and the

Maintaining a proper balance. scholastic activities of the school. It is true that all reputable schools now have a scholarship requirement imposed on students who desire to participate in interschool contests. In spite of this fact, however, it is to be feared that the athletic spirit sometimes predominates over the scholastic spirit in schools. It is, after all, rather an anomaly for several hundred college students to hire a special train and go one or two hundred miles to witness a base-ball or a football game between their own college and a rival, and it is to be feared that this practice is also growing in the high

schools. Undoubtedly some advantage accrues to many students from the opportunity to visit another institution and meet its students. On the other hand, such a jaunt cannot help being a serious break in the continuity of thought and study supposed to constitute the *raison d'être* of the school. The amount of money spent by the students upon these trips and the standards of expenditure established constitute another serious aspect of the problem.

While physical games and sports are so necessary a part of the life of the school, and while permanent inter-

Play not to usurp the place of work. interest in this line of avocations needs to be cultivated for its later bearing upon the individual, yet the school must not forget that its great business is, after all, study and scholarship, and not play. Play is to be the *avocation* and not the vocation in the school; it is to be an incidental and not the fundamental activity in the student's life.

The mental avocations are closely related to the physical avocations in so far as the fundamental impulses prompting them are concerned. The chief difference is that the physical activity has dropped out, and that the play of mind instead of the play of body occupies the centre of the stage. The stimulus of competition and the instinct of combat are still present, and not infrequently the influence of public opinion and social appreciation accentuate the interest in the game. This group of avocations is not so important as an immediate school problem as are those based on physical activities, since interest in mental games as supplanting physical games is rather late in its origin.

The mental avocations are related, on the one hand, to the scientific pursuits, in which the play of mind comes to be an end in itself; and, on the other hand, to the type of combat involved in the business pursuits, where the opponent is not attacked physically, but is vanquished with the weapons of the mind.

The child first shows a developing interest in mental games when he begins to concern himself with the solution of conundrums, acrostics, and various other puzzles; the different games played with cards, checkers, chess, and such games, in which mental quickness, memory, invention, daring, successful judging of an opponent, and concentrated attention are the necessary attributes constituting the group of mental avocations.

Closely related to the mental avocations are the games of chance, which are often an outgrowth of games otherwise harmless. The gaming impulse is all but universal in the human family. Care should therefore be exercised in the education of children that their mental games do not lead in the direction of gambling, which is the bane of so many lives, from those who patronize the nickel-in-the-slot machines or the cheap faro game to those who play the no less debasing games of high finance.

The social avocations have their rise, first, in the gregarious instinct, which prompts people to assemble together, and, second, in the desire and need for diversion and amusement. It is true that the social impulse plays an important part in the groups of avocations just described, but there exists a tendency to flock together in larger groups, and

perhaps in different groups from those in which we play our games. In the larger group assembled for social diversions or amusements, the rules of the game are no less strict than in the case of our physical and mental games, for they consist of the social conventions, than which there are no rules more strict.

In addition to the stimulus and enjoyment experienced from association with the large crowd or group usually

Part played by the social impulse. assembled for social amusement, no small part of the pleasure comes from the opportunity to mingle on intimate terms with a few chosen friends among the larger crowd. Not infrequently also sex attraction plays a large part in this type of avocations. Young people pair off for the occasion, or at least have the privilege of each other's company, thus adding another incentive to participation in the social diversions.

The deep-seated and universal nature of the impulse prompting to the social diversions may be judged from

The universal appeal of social diversions. the important part played by this form of avocation. It includes all classes and ages of people. The children beg for their parties and the old settlers have their reunions.

The rustic party and the country dance, in common with the exclusive reception or ball, are an outgrowth of the desire of people to mingle together in their fun and amusements. To gratify this impulse millions of dollars each year are spent on our amusement places, the public parks, summer gardens, theatres, and other means of social diversion.

The social avocations touch the problem of education specifically with reference to the question of the type of such amusements and diversions which shall be engaged in by young people. For it is inevitable that young peo-

ple will have some form of social amusement; further, it is right and necessary that they should have. The ques-

Points of contact with education. question is, first, what shall be the type of this amusement, and, second, what shall be the amount? Many of the amusement places in our cities which seek to attract boys and girls constitute a menace to morality. Nor is the country town with its dearth of amusements of any kind on much safer ground. The social impulse is very insistent in youth, and the young people will be together on the streets if there is no opportunity to mingle for diversion in social groups. It is far safer and better for them to associate with each other under conditions in which the proper social conventions obtain as a standard for conduct.

The problem is not yet solved of supplying suitable social amusements that shall afford reasonable opportu-

Problem of social amusements in the school. nity for young men and maidens to associate in social groups under proper chaperonage, and where they can learn to observe and

be at ease under the social conventions.

Various high schools are beginning to take this problem up and assume the function of ministering to and guiding the social impulses of their students through social entertainments given under the auspices of the school. In hundreds of towns and villages throughout the country the school-house could profitably be made into a social as well as a scholastic centre, the school thereby exercising a helpful influence over the avocational life of its pupils.

Danger of waste of time and attention. The question of the proportion of time devoted to social amusements constitutes a serious problem in many schools. For not infrequently young people take the matter into their own hands and organize social functions with little restraint from parents and no supervision on the part of the

school. The result in many communities has been a multiplication of social clubs, societies, parties, dances, and other forms of social amusement without end. Of course, this excess of the avocational interferes with the regular activities of the school in no small degree. The solution of this phase of the problem will have to come through the co-operation of the home and the school in seeking to limit and properly control social amusements without eliminating them.

The incidental avocations rest chiefly on certain personal or subjective impulses which prompt the individual

"Incidental" avocations. to take up some line of interesting occupation purely as a diversion, and not with a view to profiting from the effort expended.

In this sense all such occupations partake of the nature of play, which finds its full explanation and end in the activity itself and counts any practical results achieved as purely incidental. It matters not that the occupation undertaken as an avocation may constitute a vocation for others. The test is not in the nature of the activity but in its motive and spirit.

The great value of the incidental avocations is that they lead to change and variety without idleness. For the

Value of incidental avocations. best rest often comes, not from idleness, but from change of occupation. Many persons

are able to forget their vocation with all its perplexing worries and problems far better in congenial and interesting employment than in social diversions or in physical or mental games. Such incidental occupations also have the great advantage of permitting the development of permanent and worthy interests in lines of activity that may result in much lasting personal growth or satisfaction. In addition, it not infrequently happens

that the incidental results or products of certain incidental avocations have a real value.

There is no limit to the lines of occupation open to those who seek incidental avocations; for almost every

**Many lines
open to
incidental
avocations.** vocation may, under right conditions, become some one's avocation. It is probably not possible to state any rigid principle upon

which the choice of an avocational occupation should rest, but at least three fundamental considerations are involved: the avocation chosen should be adapted to the interests, physical powers, and financial ability of the individual; it should be of such nature that it will allow growth of skill and will call forth worthy and permanent interests; it should be different enough from the regular vocation of the person to furnish a complete diversion because of the change of activity afforded. For example, a stock-jobber runs a fancy farm as an incidental avocation; a professional linguist is an authority on birds; a celebrated actress raises blooded chickens; a banker is a craftsman of ability; an author dabbles in chemistry; a university professor is an enthusiast over motorcylces. Each of these workers secures great satisfaction from his avocation, and does better work in his vocation because of his incidental occupation.

The incidental avocations touch the educational aim less closely than certain other avocations, but yet are

**Incidental
avocations
and education.** by no means divorced from it. It is the business of the school to cultivate as broad a line of permanent interests as possible.

Some one of these interests should lead to a vocation; and others of them should serve to point the direction for desirable avocations. Nor is it rare that a line of activity taken up in early youth as an incidental avocation

has led to its acceptance as the vocation for which the individual's interests and capacities were best adapted.

III. The School and Its Avocations

Concluding our discussion, we may say, then, that the school cannot escape the problem of the avocations. For **The school
cannot avoid
the problem
of avocations.** the school has the individual at the time when the avocational is playing the largest part in the life, and when the avocational interests and standards are being developed.

The school should therefore both teach the child suitable avocations and inculcate a love for them. It should afford an opportunity for active participation in the avocations best adapted to the age and development of its pupils. Above all, the school should stand for true sportsmanship —for absolute honesty and a spirit of generosity and appreciation toward opponents. Further, the school must help the individual to distinguish clearly between vocation and avocation. Work is not play, any more than play is work. And all attempts to make education result from a set of play exercises are not only doomed to failure, but they also lead to false standards and attitudes of the individual toward work. Work and play must therefore not be confused; they are complementary, and not synonymous. The centre of the school's interests and activities must be its scholastic work, and not its athletics, its parties, or its clubs. These are all necessary and good, but they are the incidental, and must not usurp the place of the fundamental.

Such, then, in brief outline, is the social process, consisting of the modes of social participation open to the

individual. It is made up of all the varied experiences of men as they live and work and play together. It includes

Summary: the social process. all the manifold activities constituting the social institutions. It includes the work of

man as, through his vocations, he carries his environment constantly upward and increases and tempers his own powers. It also includes man's play, by which he rests from his work, brightens the more sober aspects of his experience, and recuperates his powers.

This social process is what man makes it; it is his creation. His powers and capacities define its scope and limitations. His impulses and needs supply **What man makes it.** its motive force. The social process is therefore man's measure in the large, the measure of the composite man. Its glories and achievements are a tribute to man's greatness; its follies and weakness are a proof of his imperfections; and its slow but sure progress toward a higher ideal is a warrant of his essential divinity.

Not only is the social process man's creation, it is also his opportunity and his nemesis. Without it he can do **His opportunity and nemesis.** nothing or be nothing. It envelops his life, stimulates him, offers every inducement for the exercise of his powers, and richly rewards him for his contributions to its welfare. But it is also relentless and cruel if it fails. Let him refuse to accept the gifts that society so freely offers him, neglecting to educate himself or develop his powers, and the social process sweeps on past him; he is punished for his inefficiency by being dropped behind in the race of progress. Let him rebel against the social order, setting his hand against tradition, law, and order, and he suffers retribution through social ostracism and the prison.

Man in the aggregate is too great and powerful for man the individual. The sum total of human lives which

The social process controls. we have called the social process sets the standard, gives the direction, and defines the requirements for the individual life-process. The individual must fit into the greater social order. Nor does this limit the possibilities for the individual; for man is at his greatest and best when he is so directing his own life-process that it may become a vital and significant part of the larger stream of social life, to the end that both shall be the richer for this mutual relationship. This is man's highest and greatest opportunity. To bring about this end is the sole function of education. All that accomplishes this end is education, and nothing else is.

Education originates in and leads back to the social process. Education, therefore, not only has its origin in the social process, but leads its product back to it. It has

no meaning except as it fits the individual for social participation in an ever-changing set of social activities. And this can be done only by leading him to identify his growing experience with the broader social experience; by causing the individual life-process to become an integral and vital part of the social process; that is, by *socializing* the powers and capacities of the individual.

The nature of the individual's powers and capacities, through whose activities he fulfils his own destiny and becomes a participant in the social process, will constitute the next phase of our study.

REFERENCES

Addams, *The Spirit of Youth and the City Streets*; Bagley, *Educational Values*, ch. XIII; Forbush, *The Boy Problem*; Groos, *The Play of Man*; Gulick, *Mind and Work*; Hall, *Youth*, chs. V, VI; also *The Story of a Sand Pile*; Hill, *Athletics and Outdoor Sports for Women*; Mangold, *Child Problems*, Book II, chs. I, II; McKenzie, *Exercise in Education and Medicine*; Mero, *American Playgrounds*; Newell, *Games and Songs of American Children*.

PART III

SOCIALIZING THE INDIVIDUAL

CHAPTER VIII

THE POWERS AND CAPACITIES OF THE INDIVIDUAL

I. The Social Nature of Individual Powers and Capacities

In our study of the social process we were viewing society in its dynamic or functional aspect. We were

The social process reflects the experience-process of the individual.

concerned with social activities rather than with social structure. And these activities, constituting as they do the social process, are but the combined and interrelated life-processes of the individuals making up the membership of society. Hence it is that the social process owes its nature and takes its color and trend from the character of the powers and capacities of the individual. Each of the various modes of the social process has its counterpart in the fundamental nature of the individual. All that is made explicit in the social activities must originally be implicit in the individual.

Powers of the individual shaped in the social process.

Nor is this merely a one-sided relationship, for the powers and capacities of the individual have come to be what they are because of his social participation. What was implicit in him through original nature has become

explicit through the necessities forced upon him by economic necessity and his social relationships; through his membership in family, church, and state; through the vocation by which he took his part in the world's work and made his contribution to social progress; and through the avocations by means of which he received development and diversion—in these ways were man's powers and capacities wrought out and brought to their present form. The social process has made man, as he in turn makes the social process.

The powers and capacities of the individual are therefore what he has to invest in the social activities of his

**The individual
the measure
of social
possibilities.** day. They are the measure of the contribution that he may make to society. On the other hand, if they are not developed, or if they are exerted against the interests of society, the powers and capacities of the individual are the measure of what society may lose through the failure of the individual to fulfil his function as a participant in the social process. Looked at from the standpoint of the individual himself, his powers and capacities are a measure of what he may sacrifice as a person if he fails to fulfil his destiny in the full realization of the self.

This point of view shows the necessity of next entering upon an analysis of the powers and capacities of the individual with a view to discovering what in the individual education has to work upon in fitting him into the social process. The

**Nature of the
powers and
capacities of
the individual.** powers and capacities of the individual might be classified and described from a number of different standpoints, but the biological will perhaps best serve the purpose in the present study. From the biological standpoint the powers and capacities of the individual

may be divided into powers and capacities (1) for impression, (2) for interpretation, and (3) for control or adjustment.

II. Capacities for Impression

The capacity to receive and respond to impressions is a fundamental biological necessity. It lies at the basis of all adaptation and control, and hence conditions development. Avoiding the philosophical squabble of the sensationalist and the nominalist we may agree that from the biological standpoint no environment exists for any organism except that from which it receives impressions. To the organism lacking a mechanism for vision luminiferous ether is non-existent and light and color form no part of experience. To one not possessing an organ for hearing, sound has no being or reality. Likewise the lack of a social sense would eliminate all social concepts and rob experience of its social values.

In this sense no individual ever enters into a ready-made environment. His world of physical objects may be rich and varied, but to him it contains only what impresses itself upon him. He may be surrounded by a multitude of living, responsive personalities, but yet lack for comradeship if impervious to social stimuli. He may live and move and have his being in a God who to him has no reality if he is devoid of religious sensibility. Each individual creates his own environment through receiving its impressions and responding to them. It cannot be created for him, nor be thrust upon him. He himself, in his capacities for impression, measures its scope and determines its nature.

On the other hand, the individual's capacity for impression, his ability to be affected by his environment, did

Environment shapes capacities. not come by chance, nor was it presented to him out of hand without responsibility on his own part. On the contrary, it is only by the reaction of the organism to its environment that these capacities develop. A varied and insistent environment demands a corresponding complexity of response; but adaptive response is conditioned by the range and validity of impressions. Hence the capacity for impressions is evolved out of the necessities and wants of the individual as related to his environment. It is in the press of the daily life and experience that they have their origin and growth.

The place of an organism in the scale of creation may be determined by its capacity for impressions. For it is

Development depends on response to varied environment. only through the broad environment made possible by a wide range of impressions that a sufficient variety of reactions can be obtained to secure successful living. The individual that is capable of responding to a simple, constant environment alone is limited to a correspondingly narrow and monotonous experience. Stated from the alternative side, progress in evolution is both dependent upon and measured by the scope of environment. Only a diverse and inconstant environment affords the stimuli requiring the range of capacity for impressions that goes with the higher forms of life.

Types of impressions. In the lowest ranges of life where a blind teleology prevails, the capacity for impressions is limited chiefly or wholly to the physical. In man it has risen to the spiritual. The objects about us do not affect us merely as physical objects,

but their social values also appeal to us. It is not alone the physical form of people that impresses us, but their spiritual significance as well. It is not only nature that speaks to us, but, back of nature, God. Nor are these two types of impressions separate and isolated from each other in experience. The opposite is rather the case, and the two can seldom be separated though they are perfectly distinct. For purposes of description and discussion, however, it will be found serviceable to speak of the capacity for impressions under the two heads of (1) impressions from physical objects, and (2) spiritual impressions.

The capacity for receiving impressions from the physical world lies at the basis of all other capacities. Out of the fusion of the sensory qualities of material objects our perceptual world is evolved. The related or logical world, the world of meaning, rests upon a world of fact, a world organized out of sensory impressions. One comes to the social nature of man only through an interpretation of impressions received from the physical expression of his social nature. God is to be apprehended first of all through impressions coming to us from his work in nature and man. Capacity for impression is therefore a measure of the amount of raw material from his environment available to the individual out of whose interpretation he is to develop power of adjustment and control.

Man is limited in the range of his senses.

At his best man has organs developed to respond to the touch of physical environment only over a small fraction of the range of the physical stimuli available. The eye responds to the physical energy in the form of ether waves providing they come at the rate of not less than four hundred

and fifty billions nor more than seven hundred and ninety billions a second. Below and above these rates all is darkness to the eye, although it is well known that luminiferous ether vibrates in waves much below and above these rates. It is interesting to speculate on the multiplied range of colors that would be visible to the human eye if its capacity for impressions from ether waves were

Limitations of the eye. to be doubled or trebled. The eye is also limited as to its range for distance. Its

power of accommodation to focusing for distance lies between eight inches and two hundred and ten feet, while even luminous objects at great distance create absolutely no impression. To remedy this defect, man has invented the telescope, which has enabled him to discover worlds beyond worlds. But he has not reached the end even with his most perfect telescopes added to the power of his eye. The eye is limited in receiving impressions from objects of minute size. Molecules and atoms exist as creations of the mind in its effort to explain nature, but vision is helpless in the atomic and molecular realm. The eye can receive impressions from the world of plants about us, but the whole myriad universe of micro-organisms is utterly beyond its ken. The influence on human history can hardly be imagined if man's eye could not only supplant but even go beyond the best microscopes and receive impressions from the infinitely small.

The human ear receives impressions from waves in the air providing the vibratory rate lies between about twenty

Limitations of the ear. and forty thousand per second. Below and above this rate all is silence, although no trouble is experienced in producing vibratory waves in the air much slower or faster than these rates. If the ear were tuned to receive impressions from

rates of air waves up to one hundred thousand a second, our range for the musical scale would be almost infinitely increased, both in range and complexity, and harmonies and melodies now undreamt of would be possible. Likewise, if the ear could receive impressions from the air waves of less amplitude than is now required, the range of distance of hearing would be increased. A man's ear might then take the place of the telephone or the telegraph.

So this line of illustration might be carried out for all the physical senses. Each of the end organs of sense is specifically adapted to receive impressions from one kind of stimulus and that alone, and only over a limited range of the scope and intensity of the stimulus. Further than this, there are probably great ranges of physical stimuli for which man has no end organs at all, and hence from which he cannot receive any impression. It is known that there are certain animals, such as pigeons with their homing sense, that far excel man in various sensory powers. Indeed, evidence is not lacking that some animals possess sensory organs of which man has no counterpart.

It is seen, therefore, that man at his best is capable of receiving impressions from only a fraction of the universe of the physical. This capacity is often still further limited by imperfections of the sensory organs. It thus seems that man, with all his boasted powers and his ability to pry into the secrets of nature, is, after all, but imperfectly able to meet and interpret the physical world.

The limitations imposed upon us by the small range of our senses, or by their imperfections, may be still further increased by lack of training in attentive observation.

Limitations of other senses.

Nature is imperfectly interpreted.

For no matter how perfect the organ, and how well it is attuned to its stimulus, no fruitful impression results except as a product of attention to the stimulus.

Need for training in observation. Gathering impressions from every side of a richly varied environment is in some degree an art. The impulse of curiosity pushes the child out to challenge the secrets of his environment, and the native demand of his mind to know that which surrounds it compels him to an attitude of inquiry. But it is a great problem that the child is attacking when he steps out to master the material world, one that the race itself has not yet more than made a beginning upon. Much time may be saved the learner, his interest and enthusiasm may be conserved, and the results of his efforts made more fruitful by directing him into the most fruitful fields of observation and teaching him its method and technique.

As the individual masters the perceptual world and becomes possessed of an increasing fund of thought

The tendency for perception to decrease. material, the impression side of experience has a tendency to diminish in amount and importance. The law of mental economy demands that all conscious impressions shall ultimately be reduced to the lowest elements that will serve as thought terms or symbols for adjustment. When the child is constructing a new percept he is prompted by curiosity and interest to discover every sensory quality that inheres in the object. He must see it, handle it, taste it, smell it, and use it in every available way. But finally this percept is no longer new; it does not appeal to interest and curiosity, and therefore claims attention only to the degree that enables it to serve its function in the thought process or in directing adjustment. It is when the percept has reached this stage that the im-

pression phase is reduced to a minimum, and its meaning or interpretation constitutes its chief interest. Observation and attention fall away, the perceptual phase of environment is losing its significance, and its relational or meaning phase is gaining ground.

But it is not necessary that these two phases of experience shall be set so sharply in contrast. There is no conflict between them except in the matter of mental economy, and economy may sometimes well give way for other values. The sunset may serve the individual as a symbol

Interest in the perceptual world may be retained. for closing the day's work and going to his evening meal, without losing its power to impress him just as a beautiful sunset with its glory of color. The first twitter of birds, the bursting of buds, and feel of spring in the air may retain distinct values of their own, besides serving as reminders that it is time to be planting the garden. Waterfalls may still have a value merely as water-falls, in addition to their being computed in units of motive power. The beautiful valley, or park, or cathedral may retain its freshness and beauty, though we have seen it a thousand times. The secret is to keep the capacity for impressions alive by constant use and to accept the physical world about us in its perceptual value, as well as in its value as symbols for adjustment.

Social impressions come to us indirectly from physical objects, persons, or the symbols of literature and art.

Capacity for indirect or social impressions. No object of our environment is a physical object *per se*, but all from the first possess a social value. The child, in the process of constructing his perceptual world, is not impressed with objects merely as objects, but with objects-as-used-by-people. His perception of color, form, time,

and space all grows out of a social setting. His world is primarily not a physical world, but a social world. Thus we do not proceed from a physical to a social environment, but from a social to a physical.

And social values continue to predominate. A watch is more than a register of passing time: it possesses social values through conforming to certain social standards as to material, size, and shape; <sup>Social values
the most
fundamental.</sup> it also points the time for going to our meals, meetings, or other social engagements. Our homes are prized not chiefly because of their physical attributes, but for values that come from those with whom we share them. Our clothing is selected not so much for its physical comfort as for its conformity to the decree of fashion governing those of our social plane. Good or bad weather even impresses us indirectly rather than directly; it is not primarily a thing-in-itself, but rather relates itself to our social activities, helping or hindering our affairs.

This means that our direct impressions, or those coming from physical objects, are all profoundly influenced by <sup>Physical values
rest on social
values.</sup> the fact of their social values. Without these social or indirect impressions the physical world would have little meaning or worth. Through them the physical objects about us cease to be mere trees, animals, or buildings, and come to be saturated with social significance. Nor is there any limit to the amount of social value and meaning that may come to be deposited in physical stimuli. Compared with the social significance, the intrinsic or physical value of objects becomes insignificant. Family heirlooms of small economic worth are beyond evaluating in commercial terms because of their social worth. Gifts are prized out of all proportion to their cost, because they take on our

valuation of the giver. Men freely offer their lives to rescue from an enemy a bit of bunting bearing the emblem of their country. Indeed, the whole structure of economic and material values rests on a foundation of social needs and desires. After the satisfaction of the most elementary appetites connected with hunger and sex, man's whole world of values may be said to depend on his capacity for receiving and responding to social impressions. Advancement in social evolution may well be measured in terms of man's ability to conceive the physical world in social terms, to look on the material, not as an end in itself, but as a means for attaining the spiritual.

The capacity for social impressions rests on the social impulse inherent in all normal persons. It is, however, ^{Cultivation of the social impulse.} susceptible of cultivation, and must be included in the educational aim. As a nation, America is not so richly endowed with social stimuli coming from historical personages, places, objects, and events as is the case with older nations. And these things constitute one of the great educational assets of a people. The battle-fields upon which England won her civil and religious liberty, the homes of her Shakespeares and Tennysons, her palaces, and even her prisons, the memory of her Miltons and Cromwells, her historic places and objects of high heroism or splendid sacrifice, and the record of her centuries of great achievement—all this is an educative factor in the lives of her youth hardly to be estimated.

^{America lacking in social traditions.} Social values have not taken hold so strongly in our own country, with its relatively short past and its broad geographical expanse. We have less of historical perspective and of social tradition. Comparatively few spots have been made

sacred by great national events. Not many pilgrimages are yet made to the homes of great men and women of former generations. This is not because America has not had her great events, her historic places, and her illustrious personages. It is rather that the bigness and insistence of the present, and the lack of a wealth of social traditions, makes us careless of these values. Material wealth is to be had for the asking. The riches of the soil, the wealth of the mines, and the roar of the factories exert a constant appeal, and tend at last to occupy the focal point of attention. Respect for the past and allegiance to social tradition are not therefore strong traits in our national character. Historical personages exert comparatively little appeal to the minds of youth. Historic places and objects command small interest and little respect. Ideal, or indirect, values cannot be listed in commercial terms, and hence are likely to be left out of account. Railways, mines, and factories are in danger of becoming an end instead of a means. The sense for social values needs to be cultivated in our youth.

While, as we have seen, the whole of our environment conveys in some degree social impressions, yet the most

Most effective social stimuli inhere in personalities. immediate and effective source of social impressions is found in personalities. We are most keenly sensitive to that which we are most like, and it is, after all, people and not things that we most fully respond to. The social in us goes out to the most vitally social about us, and we are impressed more by the human than by the material part of our surroundings.

But personalities may exist in either ideal or in real form. They may inhere in the people with whom we actually mingle and associate, or they may be conceived by

the artist or the writer and made concrete in a painting, a statue, or a character in literature. Since these ideal characters are not subject to the limitations of human nature, they may be endowed by their creator with any combination of qualities of personality, and may possess these qualities in any degree whatever. The only limitation is that the personality represented must not be overdrawn to the extent of losing the natural or human aspect. For once this is done, the character has nothing in common with us, and hence fails to impress us.

The capacity to receive and be influenced by ideal personalities expressed through the symbolism of art and

language constitutes one of the most potent opportunities for education. Through this capacity the great personalities of literature, history, and biography may exert their ennobling influence on the lives of those of other times and places. In this way, the greatest of human qualities are made the common property of the race, and the thoughts and feelings that actuated men and women of other ages, or even men and women who never had existence except as creatures of the mind of artist or writer, may come to serve as motives in the lives of to-day. And, indeed, it is upon this universal social sense that the unity of the race and the continuity of culture depend. Upon this sense rests our feeling of kinship with past generations and our feeling of responsibility for those that are to come after.

On the other hand, the capacity to receive social impressions from personalities is not limited to the better qualities of human nature; the undesirable may impress itself equally

Real and
ideal
personalities.

Ideal person-
alities repre-
sented in art
and literature.

Influence of
the evil in
personalities.

with the desirable. Hence the evil influence that comes to the child from the criminal or the morally tainted character often portrayed in trashy literature, or from the pictures of doubtful moral standard. Sometimes through conscious imitation, and often through the unconscious influence of suggestion, the qualities of character thus portrayed build themselves into the personality and conduct of the child. With these facts in mind, the selection of the personalities from literature and art which are to have a part in the education of the child becomes a matter of prime importance.

But the most potent source of social impressions is, after all, from the actual people about us, the human com-

*Real people
the most
potent social
influence.* companionship that environs us from day to day. Life is appealed to more quickly by life than by symbols, no matter how skil-

fully these may be employed; the child's playmates and companions, and his associations in the home, are a greater formative influence in his development than are the ideal characters of his books and pictures, important as these are. Principles and ideals, no matter how true or exalted, have relatively little power either in forming or reforming human nature until they are made concrete in a living personality. Hence it is that all great social movements, whether in politics, religion, education, or any other line, are led by some man or woman whose life embodies in concrete form the principles for which the movement stands. The splendid theories of Bacon, Locke, Comenius, and Montaigne had to be exemplified in the life of Pestalozzi, the teacher, before their effect was felt; only when God had revealed himself in the person of Jesus did man grasp the fuller concept of God's relation to him.

Need of correctly interpreting others. One of the highest arts is that of correctly interpreting those about us. Nor is it an art possessed in large degree by all. We often know very incompletely, and often judge very falsely, even those with whom we daily associate and whom we know best. Most of the misunderstandings among people are from simple failure to understand each other; and this denseness of comprehension grows out of a lack of social sensitivity, the ability skilfully to read the natural or conventional signs by which we express our thoughts, feelings, or attitudes.

The capacity for social impressions is susceptible of fruitful cultivation. There exists no science of human

Capacity for social values may be cultivated. nature, it is true, from which may be deduced the principles and rules to be applied in arriving at a knowledge of those about us.

Yet changing mental attitudes and emotions are constantly finding expression in the mobile face, the eye, and the bodily posture. There is constantly being spoken before the eye a language of surpassing variety and richness, the delicate shadings of whose meanings are lost upon those illiterate in these forms of natural speech, and upon those who are too careless to observe. Thought is being expressed through the medium of a spoken language capable of revealing the finest shades of meaning. The flexibility of spoken language is still further increased by means of the various qualities, shadings, and inflections of the voice, and by many other tricks of speech too refined in their import to be possible of explanation. The mastery of all this great complexity of expression is no small task. It must first of all be motived by a strong desire to come to know and understand others. It requires the habit of observation of

those about us, and the most careful attention to the modes of physical expression by which mental self is revealed.

III. Capacities for Interpretation

Impressions are not an end in themselves. The natural outcome of all impression is response with reference to some environmental situation. But in order that the response shall be intelligent, the impressions received must be correctly interpreted. That is, their relations must be discovered, and their meanings known; their value must be weighed, and their importance estimated. Interpretation thus stands as the middle term between impression and response, between contact with environment and adjustment to it. It seizes upon the different impressions gathered by the mind from its environment and uses them as data out of which to construct symbols for action. Upon the validity of interpretation, therefore, as much as upon fulness and accuracy of impression, depends successful control with reference to environment.

The interpretation of our environment lies in two broad fields, which, while always interrelated, are perfectly distinct. Interpretation is (1) in terms of knowledge, leading to science; and (2) in terms of feeling, leading to appreciation of values. Neither is possible without the other, and both together are required in successful control of the experience-process. We will therefore proceed to examine more fully these two types of interpretation.

What is knowledge? What is its origin, and what its end? A formal definition of knowledge will be of little service in our discussion, since its general interpretation (1) in terms of meaning is as well known as that of any knowledge. The terms in which it might be defined. The question of the origin and end of knowledge will, however, repay some consideration.

Knowledge is the perception of truth. But truth is always concrete and never abstract. Truth, so far as the concrete nature of knowledge. finite mind can know it, is not an invention of that mind; it is rather a *discovery* by that mind. And there is no such thing as a truth which is separated from the concrete situations of experience. Likewise knowledge, or the perception of truth, arises in the first place out of the demands of some concrete problem of experience which requires solution. The ancients were confronted nightly by the glittering heavens, the fact of day and night, the change of seasons—and astrology grew up; and out of that astronomy. People all through the race's history have sickened and died, disease has been a constant and insistent fact demanding explanation; and the science of medicine has been evolved. The Nile overflows its banks, washing away the landmarks; and the science of geometry is the result.

While it is true that we have what we call "abstract truth," "pure sciences," and "knowledge for its own sake," yet as a matter of fact there is no knowledge for its own sake. There is no truth so abstract that it does not somewhere fit into the great mosaic of truth that touches men's lives; nor would the delvers after truth long continue to dig were there not the stimulus of society, welcoming all truth, not as an abstrac-

tion, but as somehow related to the day's experience. Nor is there any science so "pure" that it does not somehow, sometime, play into the hands of some other science which, in turn, guides men in the business of living. Further, there can be no knowledge "for its own sake." The very essence of knowledge is its *meaning*; and knowledge having existence only for the sake of existing, that is, knowledge for its own sake, would lack all meaning.

Knowledge, therefore, has had its origin in human experience, especially in human needs, or the crucial points

Social nature of knowledge. of experience. And, since experience is chiefly social, knowledge has grown up out of the demands of the social process and finds its function in guiding that process. It is when society becomes organized and complex that the crises arise demanding knowledge. When cities and bridges and canals and aqueducts must be built, then knowledge must grapple with the crucial situations. When increasing population threatens to exhaust the natural resources, science must arise to direct the conservation of these resources.

Now it naturally follows that, since knowledge has its origin in the problems confronted in the concrete situa-

Social function of knowledge. tions arising in society, so its end or function is to direct in the social process. It is through knowledge that man is able to master his environment, and hence control the processes of his own experience. True it is that isolated bits of knowledge are discovered now and then which seem to have no bearing whatever in a practical way upon human welfare. But such is not ultimately the case. Our vision is at best but a partial vision, and our view of truth necessarily a distorted one, since we cannot see it all. If our

thinking is to be depended upon at all, then truth is ultimately a unitary thing; it all fits together in one great pattern, like the parts of a puzzle-map. And each part of the universe of truth finally touches and influences every other part, even to those parts that are in daily contact with our common lives. To illustrate: It seemed a trivial and useless thing when the microscopist first discovered that there are micro-organisms in the plant world far too small to be seen with the unaided eye. What could be the use of this bit of truth, since we could never cultivate these organisms commercially or employ them in any way? But not so. We now know that the world of microbes is as intimately related to our lives as is the world of chlorophyl plants. Likewise, a very useless and abstract thing it seemed when the scientists discovered that electricity acts in waves of energy of different lengths and amplitude. Yet out of it all we have wireless telegraphy, and to-day there may be a message flung out over the ocean that will result in the converging of a score of ships to save a sinking vessel.

Undoubtedly, since man is finite and hence limited in his relations, that is to say, in his points of contact in the

Degrees of concreteness in knowledge. universe, some phases of truth come closer to his day's life than other phases; in other words, some knowledge is more concrete and immediately valuable than other knowledge. For example, with man's present stage of development, it would seem to matter less to him to know whether those marks on the planet Mars are really canals, than to know the cause of cancer and its cure. It would seem to be less valuable to him to know how many inflections some word in Sanscrit may have had than to know how so to care for his own body as to insure health and long life.

Knowledge is, broadly, of two kinds, (1) perceptual knowledge, or knowledge of things, and (2) logical knowledge, or knowledge of their relations. The first we get as a direct or indirect result of the stimulation of sensory organs; the second comes through thinking these things into a system; that is, through discovering their mutual interdependence or interaction—their relations. The first type of knowledge is fundamental, since without it the second could not exist. The second type is no less essential, since without it sensory objects would have no meaning, or so little meaning that they could not serve as symbols for any complex adjustment. While these two types of knowledge are perfectly distinct, they are not separate in experience. A thing and its meaning cannot well be divorced in our thinking.

When knowledge has become organic, that is, when knowledge of the second type has gone far enough so that

the relations between the various phenomena revealed to us through the sensory science. processes are seen and organized into a system, the sciences arise. If the relations between the various phenomena are fixed and unvarying, we have an "exact" science; if the relations must of necessity be variables, as in the case of the economic relations of people, we can no longer have an "exact" science. Yet the difference in exactness is, after all, only one of degree; and for the work required of social science it may be as serviceable as is the science of mathematics for what is required of it. In the case of a field of knowledge in which the phenomena or their relations are not yet well known we have no science at all, but only a body of knowledge which is growing in the direction of a science.

Science is the ultimate end toward which knowledge is striving. When knowledge has become science it •

Science the ultimate end of all knowledge. serves as an efficient instrument of control. This is its function. Arising in the problems of one set of concrete situations, it finds its end in aiding in the solution of another set of concrete situations. The scientific discoveries of yesterday direct the activities of to-day, and the environment which then mastered us is now made to contribute to our progress. Through science we control the forces about us, so that steam and electricity, and even the winds of heaven, are harnessed and made tamely to do the work of man.

And it is altogether fitting that the science wrought out by one generation should play into the hands of the

Science an instrument of social control. next generation, thus giving them the advantage of a more perfect control, and enabling them to attack new problems and achieve new victories. It is this team work of the generations that makes progress possible. It is almost impossible to estimate the advantage possessed by the present generation over the one living a hundred years ago by virtue of our knowledge of electricity, mechanics, the laws of nature, the body and mind, and a hundred other fields in which man is slowly but surely winning his way.

Illustrations of science acting as an instrument of control are to be found on every hand. It has already been

Science advances knowledge. seen how science helps in the obtaining of further knowledge in all fields. To note but a few examples: By constructing the telescope and microscope, science has added vastly to man's knowledge of the material universe. The science of mathematics has enabled him to arrive at results in all lines of knowledge which otherwise would have been

impossible. The sciences of neurology, physiology, and pathology have furnished a foundation for more fruitful work in the field of psychology; and the science of biology has become the basis for all the social sciences.

Control through science does away with the reign of superstitions. Science has taught that sickness is not

Science destroys superstition. caused by evil spirits, and witchcraft has died a natural death. Nor is sickness longer

looked upon as a visitation of Providence, but as a result of the violation of natural laws, and it is therefore to be prevented or cured by conforming to those laws. This simple standpoint has resulted not only in relieving man from a degrading burden of superstition, but also in lengthening human life, and in reducing human suffering to an almost incalculable degree.

Science has likewise taught us to look for the causes of poverty in other sources than those of mere chance;

Science aids social pathology. and we are coming to-day to look upon pauperism as a social disease, and are trying

to control it as in the case of physical diseases by removing its causes. Science has given us a new standpoint in the treatment of crime and we are seeking now in our wiser moments to control it at its source in place of at its outcome.

We are coming, through science, to understand the heredity of plants and animals, and can now successfully

Leads to control over nature. control the type of product in either, so that when the breeder determines a type

that he would like to produce, he has but to apply the teachings of science, and the desired results follow. In our crusade for the conservation of natural resources, science is to be our greatest weapon of control. For example, it is now showing us how we may achieve better results in building by the use of nature's indestruct-

ible materials rather than by cutting down our forests; it is teaching us how to construct our buildings so that they may not burn up; it is discovering to us how to mine and burn our coal so that we may not waste nature's supply of fuel; it is instructing how to utilize human labor that the largest returns may be secured with the least possible degree of waste.

The sciences of physiology and of psychology are coming to give man a control over the forces that operate in his life, and hence over his ultimate destiny, to a degree that was wholly impossible in the days of ignorance and superstition. Man is coming to realize that even personal morality has a scientific basis, and that he who would live in accordance with ethical principles must first of all have a thorough grasp upon the sciences that underlie the very foundations of life.

It seems evident, then, that man must interpret his world in terms of knowledge if he is to become master of his realm. He must *know* his environment, both physical and social; and he must also rightly conceive himself and the end toward which he is moving. If he is to achieve his high destiny, teleology must in him become clearly intelligent, which is to say that it must be founded upon a systematized and organic body of knowledge; that is, upon *science*.

The individual interprets the world not in terms of knowledge alone, but also in terms of feeling. He not only *apprehends* truth or reality, but he is also *affected* by it. The universe has for him not only meaning, but value as well. While knowledge is an instrument of control, feeling is the motive force in life. Knowledge is the rudder, feeling is the power that drives the machinery.

*Interpretation
(2) in terms
of feeling.*

Feeling functions first of all as an appraiser of values. It takes the thing that knowledge says is true, and specifies how much this thing is worth. It puts the stamp of reality on experience and dictates what things are worth while. It sets up the great goals to be striven for and the great disasters to be avoided. It floods the life with riches or starves it with poverty.

The world interpreted in terms of knowledge alone would be a very cold and incomplete world. Experience defined as knowledge only would still have meaning, but it would be pale and devoid of warmth and color. Reality constituted exclusively of things *known* would still possess the form or reality, but lack most of its content. For the truest and deepest realities are precisely those that have the largest element of feeling in them. One's affections are much more real to him and, subjectively, of infinitely more worth than his knowledge of higher mathematics or the niceties of linguistic inflections. Fear of an earthquake or a tornado is a clearer reality than a demonstration of the nebular hypothesis. The feeling of patriotism comes closer to the life than any theory of the state, and religious fervor outweighs as a matter of personal experience the theological doctrine of supererogation.

While it is true, therefore, that all interpretation must be based on something *known*, yet it is no less true that

Full interpretation of the world impossible without feeling. a full interpretation of our environment is impossible without going beyond knowledge. The person who looks at the sunset with a complete knowledge of the scientific laws underlying the production of the crimson, yellow, and orange colors, but feels nothing of its beauty, is at least as far from having fully interpreted the sun-

set as if he had been alive to its æsthetic values, but had lacked knowledge of the laws of the ether vibrations constituting physical light.

One may know the facts of history, and yet fail to interpret peoples of other times because of the inability

Vital relation of knowledge and feeling. to feel across the stretches of time the pulse of the human heart as it beats in joy or sorrow, in hope or in fear. It is possible to be an acute theologian, and yet fail to interpret God because of lack of the feeling response. On the other hand, one who is little of a philosopher and less of a theologian, may arrive at valid and serviceable definition of God through a vital response of feeling. Finally, dropping into popular phrase, the heart must join with the head in the interpretation of our world. While the heart without the head would give us a world of values distorted because lacking the perspective of relationships, so the head without the heart would give us a world of meanings without values because lacking in warmth and worth.

The interpretation of the world through feeling takes four general directions: (1) Feelings whose terminal aspects are the self—*egoistic* feelings; (2) feelings which have for their object other people—*social* feelings; (3) feelings which grow out of the perceptual world—*æsthetic* feelings; (4) feelings whose object is God—*religious* feelings.

Whether feeling was the earliest form of response in the race and the first mode of interpreting environment, it belongs at least among the first of the powers of the individual to develop. The egoistic are the first of the feelings to have their rise, and remain a prominent factor in determining the attitude of the individual throughout life.

The "egoistic" feelings.

The egoistic feelings, or self-love and interest, are a natural biological product. In the economy of the race it was found serviceable for the individual to care for himself first and foremost. By logical product. the child his environment is interpreted first of all in his relation to his own comfort and welfare. The material world is of value only in supplying his needs. His mother, even, exists that she may minister to his pleasure or relieve his pain. He is thoroughly self-centred, in the highest degree selfish.

The egoistic feelings decrease relatively, if not actually, with growth of experience, and particularly with the rise of the social feelings. Yet the egoistic feelings never lose their grip upon the life.

Relative decrease of the egoistic feelings with age. As the self develops and comes to include the wider cycle of existence, these feelings change in form, but still exert their influence. By those who have an excess of egoistic feeling, the material resources of the earth are often interpreted solely as an opportunity to amass personal fortunes beyond reasonable needs. Men are not infrequently looked upon by certain of their fellows as so many units of energy to set at work for the selfish ends of him who controls them, or as so many voting machines to count a tally toward bringing power and honor to the one who manipulates them. Religion has by some been valued chiefly as a life-preserver intended to buoy its possessor safe into the heavenly port.

The social feelings early have their rise, and are as necessary to the full development of the individual as are the egoistic. Through the social feelings, material wealth is interpreted in terms of the amount of pleasure it can be made

to give others. Fellow men are looked upon, not as an opportunity for exploitation for selfish gain, but as an opportunity for helpful co-operation and service. Famous pictures are not to hoard in private galleries, shut away from the world, but are to loan or give to public galleries, or to copy and spread broadcast among the masses. Medical discoveries or mechanical inventions are not to sell to the highest bidder, but to give where most needed. Religion is not a species of death insurance, but a method of contributing service.

The social feelings have given rise to some of the most significant terms in human speech. Friend, companion,

*Significance:
of the social
feelings.* lover, comrade, coworker, fellow-countryman, and a host of other terms suggest different aspects of this group. And it is not hard to understand how far short of a full and complete interpretation of our world we should be should we drop out of it the values that come through our interpretation of men as friends, companions, coworkers, and all the rest.

The present age is undoubtedly to go into history as an era of transition from the individualistic to the social standpoint. This is coming to be known

*The "social
century."* as the "social century." The social feelings are playing a larger part in the interpretation of the world than in any former time, and are giving rise to new concepts and new motives such as "social solidarity" and "universal brotherhood."

Through the æsthetic feelings the world *The "æsthetic"
feelings.* is interpreted in terms of beauty, fitness, harmony, and completeness. The æsthetic feelings awaken relatively early in both race and individual. The beauty of nature's colors so appeal to prim-

itive man that he paints them on his dwelling and his weapons, and even on his body. The little child determines the value of a toy or a picture in accordance with his notion of whether it is "pretty" or not.

It is the æsthetic feelings which save the yellow primrose on the bank from being just "a yellow primrose and

The value of aesthetic feeling. nothing more." These feelings make sunsets more than a symbol for closing the day's work or going to the evening meal.

It is æsthetic feeling which gives architecture its value, and makes it worth while to put much labor and treasure into beautifying our homes, public parks, boulevards, and playgrounds. It is æsthetic feeling that makes a few grains of paint and a few square feet of canvas possess so high a value.

Lacking in æsthetic feeling, an individual misses the full interpretation of the world, just as surely as if he

Beauty one of the most vital phases of experience. were to lack in the egoistic or the social. It is true that these are more nearly related to bare existence, but man is destined to more than mere existence, and must pass beyond the economic in his interpretation of the world. Too many lives are now barren of the beautiful, because of stifling the æsthetic feelings or failing to develop them. To all such, one of the richest and most fruitful phases of reality is lacking. To them the beauties of nature and of art, the harmonies of sound, and the exquisite in form and feature are without worth, because of failure to respond to them; and hence their world is but the fraction of a world.

The "religious" feelings. God in his personal relation to men is to be interpreted chiefly through feeling. Only in this way can He become a God of reality and of ex-

perience. The perceptual world gives constant evidence of his presence as a creative force, and reason and revelation tell of his relations to man. But a God known only in these ways is a very distant and cold reality. Not until religious feeling has interpreted the nature of God as father and friend does he become an immediate reality, possessing felt value in our lives.

Religious feeling necessary to a full interpretation of the world. Religious feeling is fundamental as a mode of interpreting our world. Practically all peoples evolve this feeling, as do all individuals. It seems to have its rise in a sense

of incompleteness and weakness, and the feelings of reverence, adoration, and worship go out to the Being who can serve as a complement to man's weakness and his need.

The religious feelings lie very close to the æsthetic feelings. The beautiful and the good are in some degree

Relation of æsthetic and religious feeling. synonymous. Both imply the harmony and fitness coming from completeness. But religious feeling goes beyond æsthetic feeling in that, while æsthetic feeling interprets the world in terms of beauty, religious feelings add to this the personal relationship implied in the fatherhood of God and a common, conscious purpose for the destiny of man.

It is seen, then, that our world is to be interpreted in its two great phases, (1) as a world of facts, the knowl-

Ours a world (1) of "facts," (2) of "values." edge of which, when organized is science, becomes a great instrument of control; and (2) as a world of values, the appreciation of which gives it its worth as an experience process. Lacking any phase of knowledge interpretation, man can exercise but partial control in his world; lacking any

phase of feeling interpretation, he has a world of meagre or distorted values. In either case he possesses but a partial world.

All normal individuals have implicit in them the powers and capacities to be used in the complete interpretation of their world. The race is far from having

Education to include both phases of interpretation. reached such an interpretation, it is true; but every generation is making progress.

It therefore becomes the problem of education so to develop these powers and capacities of the individual that the world may come to be interpreted at its fullest and richest; that its *meanings* and its *values* alike shall come to serve as symbols to guide in the experience process.

T

IV. Powers of Control

From the biological standpoint, capacities for impressions and interpretation exist only that adaptive response may follow. The degree of mind required is measured by the necessity for lead to control. adjustment, and hence powers and capacities never evolve for their own sake, but the better to enable the individual to fit into its environment. In lower realms the environment is accepted chiefly as it is found, and control only consists in adjusting the organism to its conditions.

For man control is more than adjustment.

But man has risen above the biological, and attained to the spiritual. He is more than an organism; he is a person. For him control is not mere adjustment. He not only adapts himself to his environment, but makes his environment over to suit his needs. Man is sub-

ject in a degree to the limitations of his surroundings, but he has the power to remove many of these limitations. He not only climbs upward himself, but he reconstructs and advances his environment in the process. He is not only subject to control, but he controls. He is therefore capable not only of *adjustment*, but of *progress*.

Freedom is measured by control over the experience process. The great desideratum in the life of the individual or society is the securing of control over the experience process. This constitutes freedom. It is the end of all social evolution, as it is the end of all individual education and development. It is the power of control that differentiates a mere racial unit into a self-directive personality.

Development to be defined in terms of control. The child at birth may be looked upon as a mere individual of *genus homo*, ready, however, to develop through the stages of experience into a person, unique and self-active. On the social side, he is at the beginning but an organ in the social body, a part in the social process, possessing no characteristics except those contributed to him by the race. But he also stands ready to develop into a *member* in the social process, a participant in social activities, a contributor to social welfare and progress. These two lines of development, the individual and the social, are but different aspects of the same unitary process. The mere individual becomes a person, and the mere social organ becomes a social member only through a gradual and constant reconstruction of experience. The nature of this reconstruction grows out of the nature of the powers and capacities of the individual on the one hand, and out of the demands of the social process on the other.

In the reconstruction of experience, or the development of the self, there is always some set of forces acting to control the direction of this reconstruction. The question therefore becomes that of the source and nature of this control.

Social and individual sources of control. At first in the life of the child the control is almost wholly social and but very little individual. If proper development goes on, this proportion changes and control becomes more largely individual and less social. Development thus implies a growing control by the individual over the processes of his own experience. But as control is always exercised with reference to the demands of environment, and as the child's environment is chiefly social, this control is always exercised with reference to an increasing consciousness of social values; that is, of social standards, interpretations, and plans of action. Education may therefore be defined as *the progressive reconstruction of experience, with a growing consciousness of social values and an increasing control over the processes of experience.*

A definition of education. The growth of control is a chief aspect of education, if indeed it may not be taken as its measure. Only when the individual has obtained command over his own powers and resources and within certain natural and necessary limitations is able to shape his own course, can he be said to be educated. Lacking this power, he is the mere creature of environment, moulded and shaped, and his course set by the influences that play upon him. This definition of education implies the necessity for adjustment to environment, but it does more; for it requires that the adjustment shall be self-controlled and not

Growth of control a measure of education.

dominated by external forces. Power of control is therefore at once the aim and the test of education.

Control involves both of the two great orders, the *self* and the *not-self*. We may then consider (1) control over the self, and (2) control over the environment. While these two types of control go hand in hand, and are seldom or never divorced in experience, yet it may be said that, roughly, control over the self means *adjustment*, and that control over the environment means *progress*.

Man has behind him a splendid record of achievement. Finding the world of nature a wilderness, he has made it a garden. The mighty forces around him, whose nature and import were unknown, he has mastered and put to his own uses. The rigors of climate have given way, space has been conquered, disease has been subdued, and a thousand other wonders accomplished. But man's greatest problem was not, after all, this mastery of the not-self; his supreme test was and is in the mastery of the self.

This must of necessity be true because man himself is the highest and most complex form of creation existing in the world, the master and leader of all the rest. If man would attain his high destiny, he must not only rightly conceive the remainder of the world, but also himself; he must not only know, but must know the knower. He must not only control, but must control the one who directs.

And man naturally comes to study and understand himself last. The great not-self insistently presses upon him and demands attention. Hunger attacks him, and he must work out the problem of a food supply. The cold freezes

**Control
(1) over
the self.**

**Man masters
himself last.**

him, and he must provide for shelter and clothing. The perceptual world challenges him, and he starts to unravelling nature's secrets. Insistent impulses throb within him, and he woos a mate and cares for a family. He at first takes *himself* for granted; immediate necessities fill his time and occupy his thought. Only when a certain degree of mastery has been attained over the not-self does man take occasion to consider the self as distinct from the external order and reflect on its place in the world.

It is true that in securing control over his environment, man has also been developing control over the self. This

Mastery of self the great problem. must needs be the case; nor could control over the self be secured in any other way than through first employing its powers in the mastery of the not-self. But even so, progress in control over the self attained in this indirect way is haphazard and uncertain because it lacks aim; it wavers, because it lacks the steadyng power of a reflective purpose. Man will not reach his goal without a more complete knowledge and mastery of himself. The world of self, which has waited till the last for study and explanation, offers greater difficulties and promises larger rewards than belong to the world of the not-self.

Nor does control over the self imply holding the reins or the whip over some vague entity that exists only as

The meaning of self-control. a figment of the imagination or the product of theorizing. It is rather to direct a set of powers and capacities as they are employed in the course of daily experience, realizing themselves and making their contribution to the social welfare. It may to-day mean a positive control, inciting to action and achievement; to-morrow it may mean a negative

control exercised to check impulses or tendencies that should not be allowed expression. Now it may require bringing the self into conformity with social standards and usages; another time it may require independence of judgment and the violation of social conventions that hamper progress. On one occasion the necessity for control may concern chiefly the physical powers and activities, leading to hygienic living, longevity, and increased efficiency. Another time it may involve the development or use of mental powers, looking toward the elimination of waste in time and effort. Again it may be a question of right and wrong, requiring ethical or moral judgment and involving social conduct. But whatever direction control may take, it has to do with a real self, busied with the activities that go to make up the experience process. Further, it is a social self, for the activities by which the self finds expression are social activities. Control over the self has its standards set, therefore, and its necessities dictated largely by social demands.

The self of which we are speaking is pre-eminently a unity, and does not consist of physical *and* mental *and* moral nature as disparate elements going in some way to make up a discrete whole.

The unity of the self. It follows therefore that control of the self is a unitary control, and does not consist of physical control plus mental control plus moral control. Having this unity in mind, it will be convenient to speak separately of the different phases of control over the self.

The physical phase of the self. Both biologically and socially the most fundamental phase of control over the self is that exercised over the *physical*. The body is but a machine, but it is a living machine. Further, it is the machine upon which the mind must depend

to gather the raw material for its thought, serve in the elaboration of this material, and carry its projects out to accomplishment. The mind is therefore subject to the limitations of this physical machine, profiting by its strength and excellence, or crippled by its weakness and inefficiency. This machine has from the beginning all its parts, but at first they exist only in embryo; they are rough hewn and imperfect, requiring opportunity for growth and development through many years.

The physical machine is subject to disease and death, and therefore requires the most careful attention as to food, surroundings, and habits of life. It is more complex by far than any other machine in the world, and hence not only presents great difficulty in bringing its various parts into correlation with each other, but it is easily thrown out of adjustment. A good example of its complexity is found in the brain. Of all parts of the body, this organ is the most carefully shut away from the external world; yet it must have full information of what is going on in the world outside itself, and must direct activities with reference to external objects and events. The neurones, which constitute the functional part of the brain, are so minute that their diameter is invisible to the eye. Their number is so great that if their fibres were all represented by wires so fine as to be barely visible to the eye, and set in a model of the brain made large enough to receive a number equal to the neurones of the brain, the base of the model would need to cover nearly an average city block. Yet each of these minute living threads has its own work to perform, and must unerringly carry out its function. Let them fail ever so little and the memory begins to play tricks, the percepts turn out to be illusions, judgment proves untrustworthy, feeling

plays false, and reason becomes muddled. Surely, from the important part played by the physical machine in man's destiny, it is incumbent upon him thoroughly to understand his body, and learn so to control it that he shall be its master instead of its slave.

Bodily health and vigor are fundamental to all success and happiness. Nothing can take their place, and nothing

*Man's victory
and failure in
the physical
realm.*

can atone for their loss; yet they are often held lightly, and are freely given in exchange for wealth, pleasure, or position.

Sickness is still by many looked upon as inevitable, to be patiently endured when it comes, and thankfully recovered from when it passes, or resignedly submitted to when it claims its victim. That man has it fully within his power to eliminate far the greater part of the physical ills that now prevail does not admit of doubt. He knows enough of the structure of his body and the laws that govern its functions to be living much longer and more efficiently than he is now doing. Tuberculosis is both preventable and curable, yet it is annually claiming its toll of victims in the prime of life. Typhoid fever exists only as a result of carelessness. Pneumonia finds the greater part of its victims among those who shut themselves from pure air. And so we might go on until we had catalogued most of the diseases that are responsible for premature deaths. Only a few have so far baffled the scientist's skill and are pronounced incurable. The rest exist by sufferance. They are an evidence of man's lack of control with reference to his body and its welfare. In part the responsibility lies with the individual, who must himself conform to the laws of personal hygiene if he would come into control of his body; in part the responsibility lies with society in its collective

control of the conditions of health. But in either case the problem is one of control through factors already possessed, both by the individual and society.

After those features of control over the physical self that are to be exercised with reference to the health, growth, and general efficiency of the body, the most important phase of control has to do with physical powers of expression. The self is essentially an active self. It is dynamic, knowing no moment of rest and inaction. It is what it is doing at any moment, and its ultimate constitution is the resultant of all its acts. Activity is the mode of its realization, the method of its development, the means by which it achieves and reconstructs its experience.

The activities of the self are synonymous with self-expression. Expression is, therefore, the true definition of the self, the measure of its development, and the means of its growth. Expression is also the end whither all impressions are tending. This is their logical outcome, and their only explanation. Not leading to expression, impressions would have no function, and hence no meaning. Impression and expression are the terminal aspects of one unitary act, of which interpretation is the middle term. Just as there can be no end without a beginning, so there can be no expression without impression. And, also, just as beginning and end are lacking in meaning or significance without reality in between, so impression and expression have no significance without interpretation to mediate between them. In other words, expression must be adequately directed with reference to the situations which give it rise, if the individual is to exercise control over the processes of his own experience.

While the self has two aspects, physical and mental, both of which manifest themselves through expression,

The physical the vehicle of expression. the physical is the ultimate vehicle of expression. For the mind cannot reveal itself directly, but is dependent on the body to make itself known or to manifest its particular states. The only mind that one can know at first hand is his own. Each mind is in a sense a prisoner within the body, and allowed to speak to others only through the messengers of the body—the lips, the face, the form, and gesture. Not only is expression, therefore, the mode of the self's development, but it is the only means by which the self can bring its powers to bear or make its influence felt. Society little cares and nothing profits by thoughts or feelings which are unexpressed.

The modes of physical expression are as many as the different acts which the body is capable of performing.

Different modes of physical expression. The products of physical expression are as manifold as the material achievements of civilization. Because of this complexity and the interrelations among the different forms of physical expression, it is impossible to set up any simple, logical classification that will include all the forms of expression without overlapping. It may be serviceable, however, to observe the following classification: Expression (1) through the medium of the body; (2) through the medium of the hand; and (3) through the medium of speech.

General bodily expression. While of course both speech and handicraft are forms of physical expression, yet there is a sense in which the body acts more or less as a unit in expression. In another sense it acts on the principle of division of labor, and sets apart

certain organs for highly specialized and important functions. Thus the body acting as a unit expresses elation or dejection by its carriage or poise; the hand, acting as a specialized organ, is responsible for the creation of material civilization; the tongue, acting as a specialized organ, mediates speech and makes possible the inter-communication of thought.

It may be said that, in general, bodily expression mediates attitudes of mind and emotional states rather

Bodily expression mediates emotional attitudes. than thought. Indeed, modern theories of the emotions have shown that it is the expression of the entire organism in response to some interpretation of an impression that produces the emotional state. The emotion which thus has its origin in a general organic expression may terminate in a similar general expression of the entire body, or may take the form of speech, manual or other specialized expression.

Certain forms of expression terminate, so far as their immediate effects go, within the organism itself. The

The physical reveals the history of the individual. expressions are too delicate or too much hidden to be observable to those about us, but they are not on that account less important in their effects. For example, one may find himself in an environment that oppresses him, and yet give no outward sign of his suffering; face and form finally come, however, to tell the story. The history of generations of serfdom is written large in the physical heaviness and lack of expression of the Russian peasants, while the freedom of the Anglo-Saxon is to be read in his alertness and the firmness of his step. The physical is ultimately a picture of the mental projected upon the screen of our senses.

Bodily poise, therefore, both indicates and tends to produce mental states. The calm and steady poise, the confident step, the unabashed eye, the alert carriage, not only speak of a masterful attitude of mind, but also react upon the mental state as well. On the other hand, the dejected form, the ambling carriage, the shifty eye, speak with equal plainness of an uncertain, uncontrolled, and vacillating attitude of mind, and likewise tend to produce or continue this very attitude of mind.

The face is the most expressive part of the organism, and therefore is quickest to show forth mental conditions. Hence it is that the mind's states **The face.** are so clearly revealed in its changing expressions. Nor is it strange that characteristic mental states, such as discouragement, dissatisfaction, pessimism, or, on the other hand, cheerfulness and happiness, should leave their permanent stamp on the face.

Gesture is a form of bodily expression that has its rise early, both in the race and the individual. Primitive **Gesture.** peoples, before they have developed articulate speech, converse through gestures. Children gesture freely in attempting to express themselves. Gesture remains one of the most effective of the arts of the orator, especially when he wishes to express mental attitudes or emotional states. Its loss from most of our conversation and much of our public speaking cannot but mean some loss in the ability fully to express the self.

Acting. Dramatic expression or acting is but another form of bodily expression. It implies a high degree of harmony in all the forms of physical ex-

**Physical
expression
indicates and
induces mental
states.**

pression, such as form, poise and carriage, face, gesture, and voice, in order to bring out fully some striking situation. This form of expression is as old as the race, and the impulse to its use rises early in the life of every child. That people understand its language and are impressed by its effect is seen in the universal response to dramatic acting in all its forms.

Speech is one of the specialized forms of expression mentioned above. It may be divided into two classes,

Expression through speech. natural or inarticulate speech, such as laughter and crying; and artificial or articulate speech, or language proper. Laughter and crying are among the earliest forms of

speech, both in developing societies and among children. Long before the savage had developed a language, he used the cry and the laugh to indicate his emotional states; and long before the child knows the language of his social group, he speaks this common language of humanity. Laughter and crying are not suited for the transmission of ideas, but belong to the lower form of transmission of mental attitudes and emotions. As civilization and spoken language have developed, greater control has come to be exercised over these two forms of speech and social restraint has been placed upon undue use of either.

Artificial speech, or articulate language, arises when a people have developed far enough that they have relatively complex ideas to transmit to others.

Language and thought. Whereas cries stood for emotional states, words stand for ideas and thoughts. So closely related is language to ideas and thoughts, that we have uniformly come to think in terms of articulate speech, and can hardly understand to-day how it would

be possible to carry on a mental life at all without this medium, not only for its expression, but also in which to house its content. Inability in the use of speech means, therefore, not only a handicap in the way of expression, but likewise a handicap in the vehicle of thought. He who lacks words must in some degree lack thoughts.

But words are not limited to expressing ideas alone. They, along with laughter and crying and the forms

Command of speech as a measure of the mental life. of bodily expression, stand for emotional states or attitudes of mind as well; and not a small proportion of the words of our

speech have for their content an emotional meaning rather than a thought meaning. Therefore, articulate speech serves as a vehicle and at the same time as a mode of expression for impressions and interpretations of every kind. In other words, our command of speech measures the range, scope, quality of our mental life.

The hand is another specialized organ of expression. To it, more than any other part of the body, man owes

Expression through the hand. his superiority over the animal kingdom. Even if it were possible to give man the

mind that he has, and all of the body excepting the hand, he would be very far from able to accomplish the civilization that to-day exists. Deprive man of the hand and the world would lose all of its art and a large part of its science and handicraft. The industries would all have to be made over and man would find himself but very little above the scale of the animals in his actual accomplishment of material civilization. The hand is pre-eminently the tool of the mind in carrying out its finest conceptions, whether this be in the form of art, manual skill, or mechanical construction of any kind.

Add to this the fact that the mind itself is developed through its various forms of expression, and we see another

Relation of manual expression to development. important relation which the hand and its arts bear to mental development. If it is true that the mind of man has grown up

not only along with his advance in material civilization, but also because of this advance, and further, if the hand has played so important a part as we have seen in constructing this material civilization, then indeed the hand is an indispensable servant of the mind; and to train the hand is not merely to make the fingers able to draw more accurately, to manipulate the keyboard with more precision, or to drive the saw with greater effectiveness; but it is also to give breadth and scope to the mind's grasp, and to train it in the processes of thought.

The expression side of education has long been neglected, and even now is not receiving the attention that its im-

Neglect of the expression side of education. portance demands. Too long has education been looked upon as a process of giving im-

pressions, with perhaps a partial interpre-
tation of these impressions. Only in com-
paratively recent years has there been a wide-spread
movement for carrying education out to its ultimate con-
clusion, namely, the realization of the full significance
of impressions and interpretations through expressing
them by means of the various forms of bodily expression,
or through speech and through the arts of the hand.

Control over the mental powers and activities presents even greater problems than control over the physical.

Control through the mental activities. The mind at birth has implicit within itself all the powers that will characterize the individual at his fullest and richest develop-
ment. Education creates no power. It only seeks, through conforming to the law inherent in

mind itself, to transform potential powers into actual powers, and, in the process, to give the individual control over these powers.

The mind at birth is as undeveloped and helpless as the body. It has few of the senses. Perception is an unlearned

Genetic development of the mind. art. Memory has no material. Imagination has not yet awakened. Thought is impossible. Feeling is vague. Yet from this small beginning the mind must construct a perceptual world of almost infinite variety. Memory must carry a great mass of useful information. A system of concepts must be developed and built into an organic thought structure to whose grasp nothing seems foreign or impossible. Commanding impulses and emotions must arise and take their place in a great system of motives that urge and drive and are yet under control. All this must be so worked out that every power has its opportunity for development, and yet each must be brought into harmony with the other, and the whole made responsive to the needs of the individual.

The problem of control of the mind is primarily a problem of interest and attention. Only the thoughts

Interest and attention primary factors in mental control. that stand in the focus of attention have sufficient vitality to eventuate in action. Those that hover on the outskirts of consciousness are of importance only as possible claimants for a focal position. But every thought that stands fully within the centre of the mind's gaze is a force to be reckoned with. For it fuses with the mental elements already in our possession, and in some degree modifies them; it forms associations with other trains of thought, and thus becomes a part of our thought material; it stimulates to action and modifies

our conduct. In the end the prevailing trend and character of our thought gauges the direction and results of our deeds.

Attention determines our environment. Environment does not consist in the things that are in physical proximity, but of the things that are attended to. All that lies outside the scope of a mind's attention does not exist for that particular mind. Each person therefore creates his own world of environment through the things to which he attends. It therefore follows that in just so far as one can direct his attention he can determine the character of all impressions received, all interpretations made and all expressions that result.

Attention thus becomes the great factor in mental control. If, through trained interests, natural aptitudes, and heroic effort, attention is brought to bear on lines of activity that lead to achievement, the outcome is secure. The processes of experience will be brought more and more within the individual's control. If, on the other hand, attention is capricious, if it follows every will-o'-the-wisp without regard to values, if it has a tendency to focus on lines of activity of doubtful value, the individual is drifting toward the necessity of external control and cannot be the master of his own experiences.

In the economy of development attention is brought to bear only at the crucial points of experience. It emerges where the humdrum routine of experience is broken into and a reconstruction of experience demanded. It is this fact that makes a varied and a variable environment indispensable to evolution. Primitive man

Attention
attaches to the
crucial points
of experience.

is confronted with a change in climate, and must make for himself clothing and a house or perish. He must reconstruct his experience at this point; attention is demanded. The railway is pushed to the foot of the mountain and cannot go over; a tunnel must be put through. Again attention is demanded. A city's water supply is contaminated; attention to its purification is necessary in order to save the lives of its inhabitants.

In youth, the crucial points of experience come thick and fast. All is new and experience must be reconstructed continuously and with great rapidity. The child has hardly become oriented in a home before he is pushed out into a wider community and a new world where he must readjust himself. This done, he is sent to school, where again he must reconstruct his experience by learning new symbols of knowledge. Physical nature is a perceptual challenge to his attention; society constantly appeals to him; he meets one of the other sex and the whole world of values is upset; the consciousness of self emerges, and a troop of social, moral, and religious problems demands solution. No wonder that youth is alert and on the *qui vive*, with so much claiming attention. The great problem is to train the attention to deal with the permanent and valuable instead of with the ephemeral and cheap.

The natural tendency of all activity is to become automatic, and hence to release attention from its direction. Hence the oft repeated becomes common and attention loosens its grip. An environment that once held the attention chained to its wonders or beauty may finally fail to claim notice. Situations and associations that at one

time enthralled the attention are later taken as a matter of fact. Wordsworth complains that as he grew older a glory had passed from the earth. All this is, of course, the very essence of old fogyism. This danger is the price we pay for the privilege of making our reactions automatic.

The aim in this connection is to save interest from fading out, to keep experience from becoming encrusted

Appeal to interest necessary. and falling into a rut. On the positive side, the problem is to keep experience in a state of reconstruction. And this requires new incentives for attention. As the old no longer demands attention, new interests are to be sought; as one aspect of experience becomes commonplace, new phases are to be discovered; when a line of activity has become automatic, new lines are to be taken up, or the old modified by improving it.

Attention is for all practical purposes synonymous with interest. Hence it follows that worthy interests

Necessity for broad scope of interests. mean attention to worthy thoughts. A broad scope of interests permits a wide range of attention, and thus saves the mind from settling down to a dead level of uniformity. Permanent interests, those that continue to grow instead of soon dropping out, supply a lasting basis for attention. The cultivation of a worthy, broad, permanent set of interests therefore becomes one of the most necessary factors in securing control over the self. Education has no more important problem than to shape the direction and give quality to the interests which dominate the individual's attention.

Ability to control conduct is probably the severest test placed upon the individual in his attempt to control

the self. The self has not only its physical aspect and its mental aspect, but also a moral aspect. Man ^{The problem of moral control of the self.} perceives the difference between good and evil and between right and wrong. He can feel and say, "I *ought*." This places upon him the responsibility of adjusting his conduct with reference to certain standards or demands.

The standards or demands that constitute the motives or criteria of conduct arise at three different levels of experience: the *instinctive*, the *social*, and ^{Three levels of conduct.} the *personal*, or reflective. The problem, approached from any one of these three levels, is the same. It concerns the difference between right and wrong, between good and bad, as relates to conduct.

Conduct that is dictated by instinctive tendencies usually has to do with the satisfying of the more fundamental needs of the organism, and does not go far enough to cover the problems arising out of the more complex social relations. Conduct arising from this source may be entirely ethical in its character and yet not involve moral judgments and control.

^{Instinctive tendencies as a guide to conduct.}

Certain lines of activity are natural and the easy thing, and are hence done without thought and without conscious self-compulsion. It is good and right to work; yet the motive prompting to labor does not ordinarily rise to the level of conscious moral control. It is also good and right to seek a mate, found a home, and rear a family; but the impulses that prompt to these activities are chiefly instinctive and emotional.

Conduct arising at the social level is dictated by custom. Indeed, it was the concept of control by custom

that gave us the Greek term *ethics* (*ethos*), and the Roman, *morals* (*mores*), both of which mean customs. That which was according to custom was right and good; that is, moral and ethical. By far the greater part of our conduct to-day is dictated by social customs. That to which society has given its approval is right; what society disapproves is wrong. It is evident that the social standard is a far broader and safer one than the instinctive. For social customs represent the collective wisdom of society through many generations; and what has stood the test of experience with many people under widely varying conditions cannot be wholly wrong. And these social standards of morality are one of society's greatest contributions to the individual. They give the groundwork for any reflective system of morals.

But the individual must rise to a higher level of morality than the customary, or social. His morality must become personal. Even if he finally accepts the moral standards precisely as they are practised by his social group, yet these standards must be subjected to examination and judged as right or wrong, as good or evil, by the individual himself. They must in this sense become his own standards. His morality must become a personal and individual matter. He must consciously intend a line of conduct because he feels it to be right, or refuse it because he feels it to be wrong. Only in this way can he rise to full control of the self and become moral in the highest sense of the term. Nor will conduct dictated from this level ignore the wider social interests and demands. On the contrary, reflective morality must proceed from the standpoint of social values, and the

good chosen will include all individuals; it will be a common good.

Although man has developed a moral nature and reached a large degree of moral control over the self, yet he is not wholly master in this realm. His conduct is often at variance with the common good, and even with his own good. He often is found at variance with the established social morality of his group, not with the desire of improving its standards, but because of impatience with its restraints on his conduct. Instinctive tendencies that he feels are wrong are still given rein. Man has not attained full control over the self in its moral aspect. *

This lack of moral control comes less from imperfect knowledge of right and wrong and of good and evil than

from a lack of power to bring the conduct into conformity with moral judgments.

Victory requires conflict. Man's instinctive tendencies are partly good, but they are also partly evil. His impulses lead now toward the right and now toward the wrong. The individual therefore stands constantly in the presence of temptation. When he would do good, evil is present with him. And this situation, if it is to eventuate in moral freedom, requires a conflict; victory cannot be won without a struggle.

Man has come up through ages of conflict. He loves to combat the forces of the not-self, but he still shrinks /

Man well trained in conflict with the not-self. from a struggle with the self; and moral freedom can be won only in conflict with the self. Man has proved his heroism on

many battle-fields, and there is no physical danger or death that can daunt his courage. He does not flinch in the presence of any seemingly impossible

task set for his intellect to accomplish. But he is in some sense still a coward when he confronts himself.

Man shrinks from conflict with himself. Like Alexander, after he has conquered the world, he finds that he still has himself to conquer. The hardest struggles and greatest victories still ahead of the individual lie in the field of moral control over the self. He has not yet fully realized in experience that it is better to rule the spirit than to take the city, and that there is real victory in going the second mile with him who compels us to go one mile.

One can hardly doubt that the greatest weakness in our present civilization is at the point of moral control.

Lack of moral control the great weakness of society. Nor can there be found any other weakness so fatal to the stability and success of a democracy. No perfection of the machinery of government, no excellence of

programme on the part of the social institutions, no amount of increase in national resources and wealth, and no degree of intellectual culture and development on the part of a people can result in permanent welfare and stable progress if the moral element is lacking. It becomes one of the first concerns of education, therefore, to develop in the individual a sense for moral values, and to give him the fullest possible control over the moral aspects of his experience.

Control (2) over environment. Man was made to rule. He not only adjusts himself to his environment, but also makes his environment over that it may the better suit his needs and further his progress. He is not only played upon by external stimuli, but he is an active agent in determining the nature of the stimuli. He is not only moulded, but he modifies. Mere adjustment to

his environment would never advance man in social progress, but would only end in stagnation and leave civilization at a standstill. In man's mounting upward toward the ideal, he has carried his environment with him. What he found but seamed rocks in the hill-side, he has fashioned into the market-place and the cathedral. The forest trees growing but to add their substance to the soil, man has made into dwellings and their furnishings. The iron of the mine has been built into the machine that will do the work of a thousand men, and the pigments of the soil have been spread on canvas in immortal works of art. Man has domesticated and improved the wild animals, and made his hardly less hostile brother of other races than his own a friend and neighbor instead of an enemy.

The direction in which man modifies his environment is a sure index of the trend being taken by the development of his own powers and capacities.
Control over environment shapes man's powers. The type of material civilization created, and the structure of social relationships developed in the social institutions and vocations, are but a composite picture of the type of impressions received from environment, the way these are interpreted in relation to the social aim, and the methods taken to realize these interpretations through control of the self and its environment. It is this fact that makes it possible to interpret the psychology of a people or a period through a study of its language, its art, its industries, and its institutions. A comparison of Roman aqueducts and military roads with Greek temples and statuary accurately reflects the different mental attitudes of the two nations in interpreting and controlling environment with reference to a social aim. The direction of

the present movement in both material and social lines in America indicates a marked tendency to interpret environment largely in economic terms, and to exercise control toward this end.

As already shown, man's control over his environment is conditioned by the interpretation he puts upon it.

Control over environment depends on interpretation of it. On the one hand, he interprets it in terms of knowledge, leading to control through technique, guided by science; on the other hand, in terms of *interest*, leading to selection, or the *evaluating* of stimuli. The consideration of this section can be brief, for it is only necessary to apply the principles already laid down.

Science has already been discussed as an instrument of control. But science is only an *instrument* of control, and does not itself exert control. For

Control through science and technique. science is knowledge; that is, a mode of interpretation, and hence fulfils its function in pointing the way to control. Control is ultimately a matter of expression on the part of the individual, the result of some activity, or response, with reference to a problem arising in experience. An object, or a situation, or making the situation over to suit the aim of the individual creates a demand for adjustment. It is at this point that *technique*, or skill in performance, arises.

Just as technique would be impossible and wholly without avail except when guided by science, so science

Interrelation of science and technique. can eventuate in control only through the medium of technique. Interpretation and expression must go hand in hand. Knowledge of the laws underlying the science of mechanics would be of small social value without the manual skill

to put them into practice. All modern industries are built on a foundation of science, but they also require a highly trained technique; the factory must not only have its scientists, but its skilled workmen. Modern surgery is a great science, but it is not less a great technique. Knowledge is power only when effectively applied to the solution of problems growing out of the concrete situations of experience.

It is not necessary to suggest the different lines in which man has already modified the face of nature through the development of science and the application of skilled technique. Hardly a day passes that our attention is not called to some new triumph of scientific discovery, or to the application of a law of science to the betterment of the conditions of living. The history of man's subjugation of his environment since the days when he was living in tribal relations is more wonderful than any fairy story. In that day he possessed but little clothing or shelter, and no certain means of providing himself with either. He had no cities and no means of transportation excepting what nature had given him. Steam and electricity were unknown. He lived under the constant dread of sickness and diseases for which he knew no cure. His plans and comfort were subject to every whim of the weather, and he could at best coax but a scanty living from the earth. He was of necessity provincial and narrow in his interests and sympathies, since he had no means of intercommunication with other peoples. He seems to us of this better day to have lived very completely under the domination of hostile forces, and to have found himself within the control of circumstances beyond his power to modify. Yet these conditions have been changed and man is

proving master in the physical world, little by little securing control over his material environment.

Man has also been securing control in the social realm as well as in the physical. He has been developing a group of social sciences correlative with the material sciences. Through much experience and many bitter lessons he has found that cruelty, oppression, and injustice are fatal to government; and to-day we have seized upon the concept of democracy, and are attempting to learn its technique. The organization of the family has passed through many different stages and been the subject of much experimentation, but the permanent monogamous relation is now accepted among all civilized people. Religious toleration has supplanted the old system of persecution; the incidentals of creed and church organization are giving way, and churches are learning to work together on the great fundamentals in a common cause. The old haphazard method of education by means of schools set up, now by industrial guilds, now by individual churches, now by towns, and again by individuals, has given way before the demand for universal education supported and controlled by the state. A marvellously complex and interdependent system of industries and commerce has taken the place of the old individualistic methods of production and distribution. In place of the early systems of barter and exchange in the transfer of commodities, a convenient and safe system of money has been devised, and this finally supplemented by a more complex system of credit currency. But further illustrations are unnecessary. In his relations with his fellows, man has met problems that as insistently demand solution as the problems met in the physical realm. And these problems

Control in
social realm.

have meant thought, experiment, verification, hypotheses, theories, and laws in the social realm as in the material. Thus has been gathering a body of knowledge of social relations to guide in the development of a social technique.

But in spite of this marvellous social progress, man is yet less efficient in control in the social realm than in the physical. The social sciences are less thoroughly developed and organized than the material sciences. It is true that the world of social environment presents greater difficulties than the world of material environment; because of his very nature, man is a harder subject to study and understand than are the lower forms of life. But this is not the only reason for the relative lack of control in the field of the social relations. The problems of material environment have pressed harder upon man than the problems of the social environment, and hence have secured first attention. So much is this the case that the term "science" yet means to many people only knowledge of material things and their laws.

And even when social science has sufficiently developed to serve as a guide for technique, social technique is more difficult than technique in the industries; for social control has to do with self-active persons and not with inanimate matter. Hence it is that, with all our knowledge of political institutions and our experience in administering governments, the machinery of the state does not always run smoothly and efficiently. Our laws are not all just, and those that are just are not always justly enforced. The relations of labor and capital are so far from being settled that the question constitutes

Social science and technique more difficult than physical.

one of the severest strains on social unity. In spite of the efforts of home, school, church, and state, we are unable to control crime either at its origin or its outcome. For we now have in the United States the largest proportion of serious crimes of any civilized nation, and this proportion is on the increase; nor are we much more successful in restraining and reforming the criminal when caught. State education has not yet eliminated ignorance and inefficiency, nor the church unrighteousness. But while all this is true, it does not indicate man's inability to control in the social as well as in the material realm. It only shows the nature of the problems still waiting for solution, and hence indicates the points where further knowledge and improved technique are needed before full control can be exercised in the social environment.

Such, in brief outline, are the powers and capacities of the individual, the personal capital that he invests in the

Relation of education to powers of the individual. co-operative partnership that exists between himself and society, and upon which he must realize for his own welfare and success.

At the first but potential capital, they must become actual through an experience process that we call development; that is, education. It therefore becomes the business of education to stimulate and guide the experience process by which these powers are realized, brought under control, and set at work in social activities. The manner in which the capacities and powers of the individual develop will constitute the subject of our next discussion.

REFERENCES

Bagley, *Educational Values*; Betts, *The Mind and Its Education*, ch. XVI; Dewey, *Moral Principles of Education*; Harris, *Psychologic Foundations of Education*; Helen Keller, *The World I Live In*; Shaler, *The Individual*; Thorndike, *Principles of Teaching*, chs. III-VI, also *Individuality*. Any standard psychologies.

CHAPTER IX

THE MODE OF INDIVIDUAL DEVELOPMENT

I. The General Nature of Development

Development is the constant miracle and mystery of life. To-day a babe, the most helpless of animals; tomorrow a man, with powers at work in the world's activities. And only *development* lies between. For nothing is added; the increase of the child's powers is not by a process of accretion, but rather by a process of evolution. Development is but the unfoldment of the innate germs of powers possessed by the individual.

Development is conditioned first of all by what may be called the original nature of the individual, his native powers and capacities received through heredity. This endowment is what the individual has to build upon, and nothing that he can do or that can be done for him will make up for any lack or shortage in this fundamental equipment. Nature is responsible for the type and amount of inheritance; education only for its development and use. Education must assume responsibility for powers that are inherent in the individual but not called forth; but education is not responsible for the calling forth of powers that are lacking, or present in so small a degree as not to repay cultivation. To what

degree individuals differ in the type and amount of the inheritance of powers and capacities becomes therefore one of the insistent problems of education.

But while development is limited by the hereditary equipment of the individual, it is conditioned not less

Development dependent also on stimuli. by the nature of the stimuli with which the individual is surrounded. For powers and capacities do not arise of their own accord

and proceed in their growth without being called forth by some external necessity. They must be demanded by environmental conditions, and set at work in solving some problem which constitutes the stimulus. Thus it follows that an environment rich in stimuli suited to the powers and capacities of the individual is calculated to demand a wealth of response, and hence secure broad development. For all development, whether of molecules or men, is the product of these two factors, *stimulus* and *response*. The function of education may therefore be defined as that of surrounding the individual with the type and variety of stimuli that will call forth the responses leading to desired development. This is the fundamental problem; all else is supplemental to it. Schools and equipment, courses of instruction, textbooks, and methods of instruction are all means to this end. Nothing that secures the response of desirable powers falls short of being education, and whatever fails at this point is not education. We will, then, proceed to a somewhat closer examination of these two fundamental factors, stimulus and response, as determining the development of the individual.

II. Inherent Attributes of the Individual Influencing Development

The question of response rests immediately upon the inherent attributes of the individual. Indeed, response is the most fundamentally individualistic thing there is. So individualistic is it that, except in the very lowest forms of life, the response that will be made by a given individual to a certain stimulus cannot be predicted with any degree of certainty. If a hundred individuals of the same species are given the same stimulus, as many different responses will follow, no two being alike. This must needs be the case, since response depends upon the type of impression made and upon the interpretation of this impression; but impression and interpretation both are modified, not only by the original nature of the individual, but also by his past experience. And so far are individuals of the human family from duplicating each other, even in so elementary a thing as the finger-prints now used as a means of registering and detecting criminals, that, according to recent estimates, forty times the population of the globe would have to be examined before there would be a chance of two individuals being found precisely alike in their finger-prints. The individual is therefore the ultimate factor on the response side. The environment supplies the stimuli, but it remains with the individual to determine the nature of the response.

Plasticity necessary to development. Plasticity is the first requisite of development. Plasticity may be defined as the capacity for receiving modifications from environment and retaining these modifications. Only the

plastic organism can change; and change lies at the basis of all development. Further, only the plastic organism can retain the effects produced in the organism by change; and none but permanent effects have to do with progress.

The young of the human family are not plastic because of their youth, but they require the long period of youth because they must have plasticity. The Biological meaning of youth. lower forms have no youth-time to be spent in helplessness and dependence. The butterfly is ready to try his wings the hour of his birth. The chick bursts from the shell, and almost immediately falls to pecking, eating, and scratching very much like its elders. The duck knows how to swim when it is born. Millions of the lower forms of animal life come into the world full-grown, each born an adult, able to go immediately at the complete round of his life's activities.

But not so with human kind. The child comes into the world more helpless than the new-born beast, and destitute of all the characteristics which Helplessness of the child. later in life distinguish him from the lower animals. And not only must man begin lower in the scale than the young of lower forms, but his rate of development is also slower. The young animal playmates of the child pass him in growth, and have reached their maturity while the child is yet a helpless dependent. While the child is climbing the ladder of development slowly and painfully, the lower forms at once leap into efficiency.

Long period of human infancy. Why should it take so long a time? Our political infancy lasts twenty-one years; economic infancy from fifteen to twenty years; and physical and mental infancy almost a quar-

ter of a century. At first thought this seems like a great waste—a third or a half of the life gone before the powers are at their best. Has nature erred or been less kind to the human young than to the lower forms? Is there a reason why man needs this long probationary period of youth and the lower animals do not? The answer is not far to seek. The animal can begin its activities at once because they are few and simple. Instincts and impulses inherited from the past are its guides to action. It finds its environment ready made and does not seek to change it. What its race has done from the beginning, it continues to do. The lower forms are not inventive. They are not progressive. Education is unnecessary, for instinct tells each individual what to do; it is impossible, for the lower animal is cut short on the period of plasticity called youth.

But the child confronts a very different problem. Man does not submit to his environment, but learns to control it. He does not blindly follow instinct and impulse as does the animal, but modifies his instincts by experience and reason. Instead of a simple environment and few activities, man has an environment of amazing complexity and is called upon to perform many and diverse activities. The culture and wisdom gathered by the race through the ages the child of to-day is called upon to master and make a part of his own experience. The attainment of centuries awaits him. All the systems of philosophy, the triumphs of art, the beauties of literature, the discoveries of science—all that man has thought, and felt, and done, is offered the child by the past as a preparation for the future. And all these things and many more must in some degree be accomplished; and they cannot be ac-

Complex environment of child.

complished in a day. There must be a season of life set apart for preparation, a time when mind and organism are in a plastic, receptive condition for the mastery of the matter and technique of living.

And it is at this point that nature has been kind instead of cruel to man in giving him the longer period of youth.

Nature kind to the child. He must have a time when economic pressure is not felt, but when the wants are provided by others; a time when state and nation can impose no duties of citizenship except that of going to school; a time when body and mind are not ripe for the sterner activities of life; a time when the child cannot be so profitably employed in any line of work as in getting ready for future work—that is, in being educated.

Plasticity necessitates education, and makes it possible. Here, then, we find the answer to our question. The child must have a long period of plasticity because he must establish an almost inconceivably complex system of responses. He must garner a large set of useful reactions as habits; he must gather a great body of information and learn to use it in adjusting himself to the social process; he must develop motives, establish standards of values, and learn the technique of control of self and environment. He must construct and reconstruct a system of personal experience that shall function as a guide in the control of his experience-process—he must be educated. And no animal that lacks the period of youth can be educated, for it lacks plasticity of nervous system. On the other hand, an animal that has the period of youth can and must be educated; can be educated, because of the plasticity of its nervous system, and must be educated in order to compete with and serve others of its species which are educated.

A period of helplessness on the part of the young implies helpfulness on the part of the grown. The ignorance of youth implies the wisdom of age. Inexperience on the part of the child implies experience and guidance on the part of adults. And the youth-time of the child is a time full of strange paradoxes. It is the least burdened and most care-free period of life; yet every child is impatient to have done with it and get at the more serious business of life. Youth is seemingly a waste time through which all must pass in order to reach the estate when things can be done that are worth while; yet a year lost out of the life at the age of five would cripple its ultimate achievement far more than a year lost out at twenty-five or fifty. In youth the mind and brain are unripe and undeveloped; yet many things are learned faster and better than at any other age. Youth is impulsive and lacks experience, yet the most important and far-reaching decisions of life must be made in youth; for it is in youth that habits are formed, moral and religious standards are set up, education determined, vocation selected, and a mate chosen. A false step taken in youth is far more fatal than one taken at any other time; yet youth's pathway is most thickly strewn with perils and pitfalls. These conditions are inevitable, since they belong to plasticity. They give society its responsibility, and also its opportunity in guiding the development of the child.

Development is always the result of forces working from within and never from without. A mine may be "Self-activity" developed, but it never can develop, for the process of development. it is not self-active. A plant or a child can develop, for it has an organizing, reconstructing force inherent in its inner nature. Every being

capable of development carries the law of its own development within itself, and its development, normally evolved, is but an expression of this inner law. That the individual may develop in one way under certain conditions of environment, and in quite a different way under other conditions of environment, does not alter the fact. The original nature of the individual ultimately contains the germ of all development, and the environment only gives now one set of activities their adequate stimulus, and now another.

The controlling influence in development exerted by original nature may be seen from such a simple fact as

Law of development inherent in individual. that from the one setting of eggs placed to hatch under a hen, one egg might produce an eagle, another a dove, another a goose, and so on. Nor can these diverse individuals be made to become alike by placing them all in the same coop after they have left their shells, and feeding and mothering them in the same way. The eagle may never become a perfect eagle nor the dove a perfect dove under treatment that will produce a perfect goose; but the eagle will remain an eagle and the dove a dove, and neither will tend to become a goose. Each must develop in accordance with the principle inherent in its own organism.

The most fundamental and universal attribute of this inner principle or force is that it eventuates in activity.

No development except through activity. Activity is a *sine qua non* of development. Nothing static progresses, much less develops. There is no mysterious something inherent in life which of itself produces growth and development, and which incidentally happens to be accompanied by certain manifestations of ac-

tivity. Activity is itself the controlling element in development, the only means by which it can take place. If it were possible to take a child on the day of its birth and give it a normal environment, but by some magic eliminate all the results of activity as fast as they accrued, the child might go on living for a year, ten years, a lifetime, and no development would have taken place, either physical or mental.

Now since development grows out of an inner force so identified with the self that its nature serves to define **This activity must be self-active.** the very centre and core of the nature of the individual, it follows that the process of development may be defined as self-activity. For it is the self that develops; it develops only through activity, and this activity must be an activity of the self. Stated differently, the potential in the individual is made actual only through self-expression; powers are realized only through their use; the self rises out of its own acts.

Avoiding the metaphysical discussions as to the ultimate nature of the self, we may agree that the aspects **Concreteness of the active self.** of it which we are discussing constitute no vague, unknowable entity, but it is concrete and empirical. It consists of a composite unity including a physical self, a mental self, and a social self, each of which is known and defined through its activities. Any activity, therefore, that involves the whole self will include each of these three aspects. If, for example, the child is to express the whole self in his play, the play must involve physical, mental, and social activities. The physical activities must be spontaneous and free from restraint; his interest, imagination, perception, and invention must be

constantly employed, and all this must be accompanied by the stimulus of social companionship.

It is very probable that the whole self, or even a large proportion of it, is seldom involved in our activities.

The difference is plainly seen in the slow, half-hearted, and forced movements of the boy hoeing the hated rows of corn, and the movements of the same boy bounding toward the base-ball field or the swimming-hole. The same difference is seen in a discouraged or uninterested student's forced, listless, and ineffective efforts at studying a lesson, and this pupil's avid attack on an interesting story or a fascinating game. In the one case the self was in abeyance, and some form of external necessity prompted the activity; in the other case the whole self was present and demanding the activity.

No doubt the indifferent boy should learn to hoe his corn, and do it well. This may be worth while even if he must be compelled by external force to perform his work. But before he will be a successful hoer of corn, and, more important still, before through hoeing corn he receives the training and development it has for him, he must come to exert the compulsion himself. The activity must come to be a *self-activity*. Similarly, the student must learn to master his lesson, even if external necessity is required. But before the student secures the full measure of development from the lesson, his efforts must be motivated from within the self. The self must be brought ultimately to affirm and support the compulsion exerted by external forces, and to take their place in bringing the powers into activity. Only in this way will activity have its full result in development and the

The self must affirm its acts.

self come to secure control over the processes of its own experience.

Nor does this mean that the activities of the self are to be compelled against the current of personal inclination and desires all the time nor perhaps

The self must give itself fully to its acts. much of the time. For, while it is often necessary that this be done, yet the full

powers of the self cannot be brought into effect in this way. When activity is at its best, whether physical or mental, it has back of it all the individual's powers and resources. The whole being urgently calls out for and demands this activity. The self wills it fully and completely; interest and desire prompt it; the entire organism affirms it and gives itself gladly to it; no part of the self is latent or withheld. If it is some problem of manual skill, not only the cunning of the hand, but all the best of the mind's enthusiasm, its invention, its discrimination, and whatever other powers can lend themselves to the work in hand, are marshalled to the accomplishment of the task. If it is a matter for the mind to grapple and master, not just the memory, the simplest processes of association and the most elementary forms of discrimination are employed, but all the powers of the mind are called forth, and the subject is conceived in all its relations and fully assimilated to the mental possessions. And this makes all the difference between superficial learning and complete learning.

The most powerful factor in compelling the entire self to participate in its activities is interest and emotion.

Interest and emotion the great motives. On its dynamic side interest is one of the most impulsive aspects of the mind. What it attaches itself to becomes at once an object of response; the entire mind and organism reaches

out for it and desires to function with reference to it—to see it, handle it, have to do with it, or in some way incorporate it as a part of experience. Interest is the great motive force, leading to action and achievement. Under its promptings, powers of the self that can be commanded in no other way come forward and function in experience, and the foundation is thereby laid for the exercise of compulsion through effort and the exercise of the will. Lacking interest, the powers of the self lag and will not be fully compelled by any of the ordinary necessities of external control. The foundation for self-compulsion is absent and the will cannot bring its effort to bear.

The general emotional attitude is hardly less important than interest in its bearing on the power to bring all the

Pleasure and pain as motives. self into action. Roughly classified, the pleasant-feeling states prompt to full and effective response, while, on the other hand,

unpleasant-feeling states cripple action and lower efficiency. The bright, cheerful, happy mood tends to bring every power to its best, while the mood of dull and heavy character reduces power of action and accomplishment. A feeling of doubt and discouragement presages failure, and a feeling of mastery and assurance goes far to insure success.

The activities of the self are not only powerfully affected by the characteristic feeling responses of interest

Social incentives as motives. and emotion, but also by social incentives. The influence of the social motives in exert-

ing pressure on the powers of the individual has already been shown. The compelling force of public opinion is powerful, both in its restraining and in its stimulating effects. In industrial and commercial ethics

it has often proved more effective than statute law; it is one of the greatest safeguards in politics; it often accomplishes in the administration of a school what rules and authority could not effect. Worthy traditions and high standards of scholarship render accomplishment easy on the part of the student, while their lack deprives him of a powerful incentive. The spirit of emulation aroused by the co-operation and competition of those in similar activities is a constant appeal to the powers of the self. The old lust for contest and the desire for mastery and control are revealed in their best and highest form in this set of motives. There is little danger in the use of social emulation in education, providing that it is balanced with social motives of altruistic nature, causing the individual to desire to measure himself by his companion when he is at his best and not under some handicap. In other words, emulation needs to be accompanied by the spirit of true sportsmanship.

Finally, a knowledge of the objective value of the activity has an important bearing on the amount of the self

Knowledge of the value of the activity. that goes into it. This is, of course, not true of the play activities, which are an end in themselves and do not depend for their value on any objective utility. But in the more serious activities the end sought is an important aspect of the question. Other things being equal, the activities that are most closely related to personal experience, immediate or remote, are the ones that most appeal to the individual. Experience is an unbroken unity which permits of no gaps or breaks. The activities of the school must grow naturally out of those of the home and the community if they are to appeal. The work of the student must relate itself to what he is doing and think-

ing in the run of his daily experience; leading this experience to a broader and higher outlook, it is true, but vitally articulating with it in order to do this. Failure to connect the activities of the school with the interests and activities of life outside the school is probably one of the sources of greatest weakness in our system of education. This failure is not only responsible for much mediocre achievement in personal development on the part of the pupils, not all of whose powers are called into requisition, but it is also responsible for much of the elimination of pupils from school before completing the curriculum.

Society has been slow in providing for the expression side of education. In fact, in the earlier concepts of education expression had little or no part.
Place of expression in development. Only the necessity for impressions was considered. The mind was to be "impressed" with facts; knowledge was to be "stored in the mind," or was to be "imparted" to the pupil; education was somewhat synonymous with information. Later, this concept was broadened to include the interpretation of the facts learned. Not just the memory, but also the reason, was to be trained; what was learned was to be understood. A certain amount of information reasonably well understood constituted an education. It has remained for comparatively recent times to comprehend in its educational significance the fact that no impression has fulfilled its function until it has eventuated in expression. And it is doubtful whether even yet we fully understand the double relationship of expression in individual development: first, as the means by which development is accomplished, and second, as the means by which it is made effective in the reconstruction of experience.

A reason has also existed on the practical side for the lack of emphasis on the expression phase of education in the schools. It is easier and costs far less to equip for the impression side of education than for the expression side. All that is needed in the former case is a teacher and text-books reasonably full of information; but in the latter case much equipment is required in the way of laboratories and material, workshops, gymnasiums, and playgrounds. And all these cost money.

Instincts and impulses are the motives to activity. Each individual when born is the heir of all the genera-

tions that have preceded him. Through countless ages the cycles of life have been coming and going. Each generation has

performed its life's activities, tried out its various experiments, and been subject to the tests of environment—and thereby learned its lesson. That the individuals were not conscious of the import of the lesson learned, or even that a lesson had been learned, does not matter. Nor does it matter to us in this connection just how the lesson was acquired and transmitted. But somehow there has come to be ingrained in the structure of the organism, and in the consciousness of the race, the lessons from this experience of the ages. In this way the race has gathered up something of the power and technique of living; it has learned how to do some things that were found best to do, and how to refrain from doing other things that were found best not to do.

It is true that, just as many of these lessons did not enter into the consciousness of those learning them, so they are not transmitted to the consciousness of the individual receiving

Practical
reason for
the neglect
of expression.

Place of
instincts and
impulses in
development.

Preorganized
neural
tendencies.

them. But they are all the more universal and useful because they do not require consciousness for their reception or operation. They come to each individual as a set of preorganized tendencies to response carried in the nervous system. A million generations acting in a given way have left this particular way as their gift to their progeny. And thus has efficiency been accumulating. In this way the race has been standardizing its activities, making fruitful acts a part of racial heritage and allowing unfruitful acts to drop out through the process of natural selection. Thus the racial habits, the lines of action that have been found on the whole to favor successful living, are transmitted to each new generation as impulses and instincts.

In this way each individual is enabled to start in with his activities where the race left off in its progress. He does not have to wait to experiment for the best way to take his food, move his body, or do a thousand other acts that are necessary for his existence and development. To be sure, these instinctive tendencies do not cover all the details of living if the individual belongs to the higher cycles of life. They deal rather with the great fundamental lines of action, and leave the highly specialized activities to be worked out in the course of individual experience. These impulses to action are so timed in their ripening that each one appears at the time when the organism needs the activity which the instinct prompts, and when the activity is no longer required the impulse drops out and the activity disappears.

Thus the individual is supplied by the race with great starting-points for development; that is, with tendencies to lines of action vital to the full realization of the self. If

Instinct a
means of
economy in
development.

these starting-points are taken advantage of when at their height as impulses, they render development easy and

Instincts are starting-points for development. effective; if they are let go by, they soon fade out from want of use, and their advantage is lost to the individual in his education.

It is safe to say that there is no great line of development that does not have lying back of it a set of impulses leading to achievement if they are given opportunity for expression.

The child's instinct of curiosity makes him eager to know; his impulse to activity makes it easy for him to have an interest in doing. The art impulse opens the way to aesthetic development and training in the technique of expression.

Instincts functioning in education. The dramatic impulse insures a love for stories and leads to efficiency in expression. The constructive impulse leads out to training in the manual industries and to the cultivation of skill. The impulse for adventure and daring prepares the way for the reading of history and literature. The rise of the social impulse prompts to co-operation in work and play and forms the basis for altruism. The problem for education is to seize upon these impulses and utilize them as sources of great lines of activity, and hence of development. Indeed, education may be looked upon from one standpoint as but a process of modifying through reason and experience the responses set up in the individual by instinctive tendencies.

A best time for utilizing impulses. To be at its best as a motive for activity, the impulse must be seized upon neither too early nor too late. There is a time when each of the great impulses is at its best as a force back of the growth of experience. The language impulse and

the impulse to imitation have their rise early and at the same time. Here, then, is the great basis for language learning and also a suggestion of the method to be employed. When the impulse to physical activity and self-expression through construction has arisen, then is the time for training in the arts and handicrafts. And so we might go on through the list of impulses; not only should we find them correlating with lines of development, but also with the educational material upon which development rests. It therefore becomes one of the important problems in education to understand the fundamental impulses of the individual and to effect the correlation of these educational agencies in a practical way.

Imitation, suggestion, and language determine the course of development. We have already seen that cer-

Development directed by imitation, suggestion, and language. tain fundamental impulses of the child are the contribution of former generations to his present welfare. Through the agency of a preorganized nervous system arranged to respond in definite ways to adequate stimuli, the most necessary reactions connected with physical existence are assured. The tendency to take food, to move, to escape danger, is independent of instruction, and depends upon present environment only for its stimuli. No intelligence is required for the initial operation of these acts, and no training is necessary to enable them to fulfil their primary function.

Imitation insures appropriate response. But nature does not provide a preorganized set of reactions large enough to cover all the responses required of an individual of the higher order of life. In order to meet a wide range of environment, the reactions must be great in number and highly specialized. Instinct in-

sures that the child will develop an articulate speech, but does not settle the question whether he shall speak German, English, or Chinese. It provides for the tendency to eat when hungry, but does not specify whether it shall be with his fingers, forks and spoons, or chopsticks. It makes certain that he will be social in his nature and desire to mingle with others, but does not dictate whether he shall employ the social conventions of the clown or the courtesan. The race did not find the particular mode in which these things are done of sufficient importance to crystallize them in instincts, hence they must be learned as needed. The fundamental impulses, therefore, only provide for the universal and biologically necessary responses, and leave the special modifications of these to be settled by each individual with reference to the demands of his environment.

The simplest method of adapting the highly specialized forms of response to their social requirements is manifestly for each new generation to adopt the ways of doing things which are followed by their social group. This is accomplished through *imitation*, or the tendency to respond to suggestions from others by repeating their acts. The instinct of imitation has its rise in the child at an early age, probably being at its height before the age of five, and slowly decreasing through adolescence, but never entirely losing its force.

The increase of ultimate efficiency effected in the individual through imitation, and the saving in time and energy, both on the part of children and adults, are beyond computation. Long before the child could be successfully instructed, and before he can conceive the necessity of learning the social technique of his group,

Economy and
efficiency
through
imitation.

he has begun to incorporate their methods in his reactions and make them an integral part of his experience. Starting with no fund of knowledge, and with no practice in learning, he has at the end of a few years secured a ready and accurate command of a difficult language, having greater facility in its use than he will find possible to develop in any other language studied later in life. Through imitation he has become proficient in the social manners and customs of his group long before he realizes the value of his acquisition. In this way he comes into possession of the forms of play and work and secures his introduction into vocational activities. Through imitation he adopts the moral and religious standards of his social group and fits himself into its institutional practices. The consequence is, that during the years of bodily and mental unripeness constituting the time when the individual is incapable of economic contribution to society, and while he still requires the care and nurture of the home, he has, without effort to himself and without expense or trouble to society, secured the most fundamental and valuable part of his education.

It is true that the capacity for imitation has also its dangers. For the individual will imitate an imperfect model as readily as a perfect one. Imitation is uncritical. Nature says to the child, *Imitate*, and he has no choice but to obey. Coarse and vulgar language, boorish and uncouth social conduct, slovenly methods of work and play, and faulty standards of morals and religion are as readily incorporated into the experience of the child as those of opposite character.

When it is also considered that the period of freest imitation is likewise the time of the formation of personal

habits, the responsibility of setting the models for the child to imitate becomes still greater. The young child

Necessity for good models. is in large degree helpless between two great controlling forces, the impulse to imitate on the one hand, and the social models presented him on the other. Nature commands that the individual imitate the acts he sees going on about him; society sets the pattern; habit crystallizes the acts into conduct, and character is formed almost before the individual is conscious of what is happening.

The child's impulse to imitate affords one of the greatest educational opportunities. For what the child can

Imitation to be utilized in education. learn through imitation he learns much faster, more thoroughly, and can use with more facility than what he learns through formal instruction. As a matter of economy, therefore, both to the child and to those who provide his instruction, imitation should be taken full advantage of as an educational agent. The subjects of the curriculum that are most easily learned through imitation should be presented during the imitative age, and should be so presented that imitation rather than formal analysis shall characterize the method employed. Thus language should occupy an early position in the course, but should be taught from the standpoint of the free use of speech guided and stimulated by the best models of both oral and written language rather than from the standpoint of grammar. The same principles will apply both to the learning of the mother-tongue and all spoken foreign languages. An incalculable amount of time is at present wasted by approaching the study of languages from the standpoint of grammatical analysis instead of from the standpoint of imitation. A similar source of waste comes

from introducing subjects that are necessarily formal and analytical, such as arithmetic, into the course too early, while the powers of imitation are still predominating over those of analysis.

Imitation naturally widens out and shades off into suggestion. In imitation the response copies the overt act of another individual, this act serving as its stimulus. In the case of suggestion, the stimulus may be either an act, an object, or a symbol, which tends to produce a response. The child watches an older person swinging a hammock, and, copying this act, himself swings the hammock; here he imitates as exactly as he can the model set before him. But also, acting on this stimulus as a suggestion instead of a model, the child may tie the ends of a rope to two chairs and swing the rope for a hammock; suggestion instead of imitation now controls the response. Or the child sees some one take a book and begin to read. But the book itself soon becomes a sufficient stimulus to set off the reaction, and the child gets the book and goes through the motions of reading without waiting for the act of the older person to serve as an immediate model; he can now act from suggestion as well as by imitation.

The ability to act through suggestion vastly increases the stimuli adequate to produce response. And this permits a wider range of responses, and hence more rapid development. If the child were to be wholly dependent on direct imitation, his physical environment could never afford a very wide range of stimuli, since it would always be necessary to have some adult at hand first to respond to these natural stimuli in order that the child might have a model for his own response. But the power

Suggestion
increases
stimuli
available to
the child.

to act through suggestion places at the disposal of the child an environment rich in stimuli of widely varied types, and also allows him to develop an individuality of his own in his responses. It permits him to follow out the inner law governing his own development in a way that would be impossible acting under imitation alone.

To be sure, the child, even in imitation, acts in an individualistic way. The imitative act is never precisely

Suggestion
allows larger
freedom in
response.

a copy of the model. Yet the play of initiative and invention is here at a minimum. Not until suggestion begins to operate does

individuality commence any rapid development. While imitation, therefore, serves to give the child an indispensable basis for originality, it is only a basis. An organized, growing body of experience in a constant state of reconstruction is possible only when the individual is reacting to his environment as a series of suggestions, and when he is left a large degree of freedom in his responses.

In both imitation and suggestion the response may be either conscious or unconscious of its stimulus as the determining factor. The child may consciously seek to imitate the act of another response.

Conscious and unconscious because he thinks it desirable and wishes to perform it, as when boys become trapeze performers immediately upon going to the circus. But by far the greater proportion of imitation is performed without any intention of copying on the part of the one who imitates. The young playmates of a child who stammers are almost certain to contract this mode of speech; a case of St. Vitus dance may cause other cases by unconscious imitation; modes of speech, manners, qualities of voice, attitudes of mind, moods, and various other attributes of

personality are copied unconsciously by the child from those about him.

The same holds true for suggestion, though perhaps not to the same degree. The child at first consciously directs his response to most of the suggestions pouring in upon him; but the response once started in a given direction, habit takes hold and tends to fix the response in this one direction. Attention to the stimulus then falls away. While of course the action of habit is necessary in order to secure a set of automatic reactions dealing with typical situations, yet there is a constant battle between habit and idea. The idea which serves as the suggestion tends to drop out when the response to it has become automatic and attention is no longer required. The problem at this point is to preserve a proper balance between habit and idea, so that there may be a constant supply of stimuli for new and different reactions; that is to say, so that the different aspects of the environment may continue to serve as suggestions demanding a constant reconstruction of experience.

It is also true that suggestion may work unconsciously in determining the tastes, standards, and attitudes of the individual. The child reared in a home environment of disorder, squalor, and dirt will find his standards influenced by these conditions; one reared in a home of culture, refinement, and cleanliness will unconsciously develop tastes requiring these things. In Hawthorne's "The Great Stone Face," Ernest found his character unconsciously shaped by the influence that had played upon him. The prevailing quality of moods, and finally the disposition, is largely determined by the characteristic

**Suggestion
shapes tastes,
standards, and
attitudes.**

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emotional atmosphere of home and school. It becomes one of the requisites of education, therefore, to keep the sources of suggestion and imitation such that the responses shall result in progress and development.

Language affords the child the opportunity for the next great advance in the range of stimuli. Once in command of language, he is no longer limited affords a greater to natural environment and people for his range of stimuli. Words come to stand for ideas; a new medium of expression and communication is possessed; people, objects, and places are created out of hand by means of description; acts and events are made to take place through narration. Through language the child thus becomes independent of immediate environment as the sole source of stimuli. Environment is generalized, and the range of stimuli made limitless. A new world is opened up, and the child, through entering it, becomes a thinking being, able to communicate his thought and understand the thought of others by means of effective and easily used symbols. After reaching the language stage, development goes on with great rapidity, and his mental progress can be measured with fair accuracy by his growth in vocabulary and its use.

The language impulse, like other impulses, has its rise when the child is ready for the activities that it prompts.

Rise of the language impulse. It grows immediately out of and ministers to a concrete, growing experience. The reason why the child learns language is that he feels the need of it, his activities demand it, his experience calls out for it. He wants to ask for this thing, call attention to that thing, and communicate another thing. To do this he must have words, and so he gropes for them. And, having through imitation found them, he makes

them vitally his own by employing them in the working out of his immediate experience. This is the natural course taken by language in any stage of its development. While the impulse can be forced, yet it is forced with waste and at the cost of efficiency. A child can be taught to imitate words, parrot-like, when he is very young. But words learned in this way do not add to his language ability nor to his general development. Similarly, an older child, when in school, may be taught many words from the printed page so that he can pronounce them, and spell them, and perhaps put them into a sentence modelled after one in the text-book. But this does not add to the language equipment of the child, nor to his general development. Indeed its tendency is rather to cripple both. Development in the command of language is correlative with the growth and reconstruction of experience; neither can successfully advance without the other. Words must get their content from the experience content of the individual, and the content of experience is summed up, housed, and rendered stable through the use of words.

The desire for self-realization is a motive in later development. Just as in his phylogenetic development man is compelled first to attend to the most pressing necessities of his material environment before he has time to reflect on himself, so in his ontogenetic development the child follows the same order. The world of the not-self is the first conceived by the child; the world of self comes to his consciousness only when he has progressed some distance in his mastery of the not-self.

**Self-realization
as a motive
in develop-
ment.**

Starting at birth with simple, impulsive responses to purely physiological stimuli, the child soon comes through

his reactions to his environment to a consciousness of the stimuli themselves. He has now made his start on

Predominance of the not-self in early experience. the mastery of the not-self. Next follows a large group of instinctive reactions in response to a wide range of natural and social stimuli. Imitation has its rise, and the individual begins the great process of modifying his instinctive reactions to adapt them to a particular environment; the not-self is looming still larger in consciousness. Suggestion takes hold, again vastly increasing the range of stimuli and more closely linking the not-self to the experience process. Language is added, generalizing the different classes of stimuli, and placing at the disposal of the child, without limitations as to time or place, the typical stimuli that have entered into the experience of the race. The world of the not-self, the stimulus world, has now come to occupy a very large place in the consciousness of the individual.

But gradually out of the activities of the experience-process a new order has its birth in consciousness; the self appears. The individual is now not only conscious of the great world of stimuli about him, but also becomes conscious of *himself*. A new and important reality has now entered into his experience-process; a puzzling reality, it is true, but an interesting one. The self is no longer dimly taken for granted, but becomes a subject of reflection and insistent questionings as to its origin, its nature, the part it has to play, and its final outcome or destiny.

Self-consciousness originates in experience. The self is born only in the throes of the life-process. It has its rise in the crush of circumstances, and comes to consciousness in the storm and stress—the crisis of experience. The

meeting of an obstacle here, the overcoming of a difficulty there, and the confronting of an inexorable law in another place, and the individual comes out of it all to realize that there are the two related orders, *self*, and other things. The power to conceive the self is an innate capacity, a part of the original nature of the individual; but, like other powers, it must reach its development through the reactions of the self to its environment. The self therefore takes in large degree its form and quality from the character of the social process in which it comes to development.

This new consciousness of the self introduces an important factor in determining the direction and extent of development. It adds purpose, certainty, and ideals. The individual now demands more than self-activity; he must attain *self-realization*. Deferred goods, and ends that cannot be immediately realized, begin to exert their influence. Ideals are set up for future accomplishment and plans are made whose fruition lies far ahead. Ability to confront the disagreeable with patience and without loss of efficiency is being developed. All this takes place, however, as a part of the desire for self-realization, and once the individual fails to see the connection between a line of activity and the realization of the self, the concept of the self loses its power as a compelling motive.

Through the consciousness of the self as an order wholly distinct from its environment, the individual is brought to realize that he is not only one among many, a part of society, a social self, but a *person* as well. He comes to see that he must not only aim to realize the social ideal, but, even more, to realize a personal ideal. There is, of course,

The sense of
value of the
personality.

no conflict between these two ideals; indeed they cannot exist apart; but yet they are not identical. One is responsible in some degree for the attainment of the social ideal; he is responsible in far larger measure for the attainment of the personal ideal. It matters much to the individual whether the social process is resulting in progress; it matters still more to him whether his own experience is resulting in personal progress; that is, in self-realization. Social destiny and personal destiny are closely interrelated, but not wholly parallel; for the life of society is long continued, and error may be redeemed through centuries of better living; but the life of the individual is limited to his three-score-and-ten years and mistakes cannot be atoned for in the flesh.

Perhaps the first step in the conscious realization of the self is *self-appreciation*, or a recognition of the worth

Self-appreciation of the person. This concept is fully attained only as man views himself in the light of necessary to his divine origin, his great capacities, and self-realization. his high destiny. To take oneself seriously in the great life drama, to believe that he has a part to play which cannot quite be played by another, to believe that he is helping to work out a great, constructive plan, which involves his own destiny and that of the race, and to feel that his own part, though small, is of infinite importance—this concept will serve at once as balance wheel and motive power in experience. The individual who has paused to reflect seriously on his origin, his capacities, and his destiny will hardly be satisfied with a small self. He will hardly question whether it is "worth while," even when the way seems steep and the load heavy, but will calmly determine, "I shall arrive;" and no toil will then seem too arduous if he but feels that he

is making progress. He will hardly dare to defeat the larger purpose for his life by lack of purpose or by small purposes. What one is worth to himself, what he may do and be with his great powers, what his opportunities and responsibility as a person are—all this constitutes an obligation and motive for self-realization transcending even the obligations growing out of social relationships. Nor will this coveted self be a selfish self. For this is a contradiction of the very notion of a large self. This larger self will not be to hoard and laud and admire, but to *serve*. As it could have no existence outside of the social process, so it would have no function except as put at work in doing its part to further social progress.

III. The Social Stimulus to Individual Development

All development, as we have seen, is the product of stimulus and response. Response is conditioned by the *Stimulus and response are co-ordinates.* original nature of the individual; stimulus is the function of the environment. There can be no response except to some stimulus that calls it forth; neither can any phase of environment constitute a stimulus except as it excites a response. Stimulus and response are therefore not only co-ordinates, they are also complements; each is dependent on the other for its very existence and reality. Nor is this a chance or accidental relation. The nature of the individual's responses is dependent upon the demands of the stimuli; at the same time the individual defines the stimuli, so far as his own powers and capacities are concerned, by the character of his response to them. Hence stimulus and response are but obverse and reverse sides of the one unitary situation in experience.

While response is primarily individualistic in its nature, stimulus is chiefly social. It has already been shown that

Stimulus primarily social. the natural aspect of environment is approached and interpreted through the social.

The stimuli arising from natural environment alone may determine the character of certain of the more elementary forms of response, but even here the social motives soon begin to exert their influence. The rigors of the climate are the immediate stimuli compelling the activities that provide clothing and shelter. These are a fundamental necessity for mere physical existence; yet social conventions almost from the first determine the precise form of clothing and house. Hunger requires the activities of the chase or the cultivation of the soil. But social usage prescribes certain rules for the hunt, and provides for ownership of the fruits of labor.

Influence of physical environment. Without doubt the wonderful natural beauty and the blue skies of Italy were a great stimulus to the artistic impulse of her people; but religious fervor and the rewards offered by the church and society for masterpieces of art were a still more powerful factor in producing her wonderful galaxy of artists. So also the placid islands of Greece were favorable for philosophic reflection; but we must look for the immediate forces that produced Socrates, Plato, and Aristotle in Greek society much more than in Greek geography.

Social and physical combine. The external influences that go to shape the individual are therefore a combination of both physical and social stimuli. To the individual himself, certainly before he reaches the reflective stage of development, the physical and the social are never consciously differentiated. They rather unite

to form one complex situation, whose elements he does not classify. When an analysis is made, it is usually found that the social stimuli are at the immediate point of contact with the individual. Yet there is always the background of natural stimuli upon which the social stimuli rest, and which play a considerable part in shaping the trend of social development. For example, it is doubtful whether the famous Italian school of art could have developed in the midst of a highly industrial and commercial civilization; but neither did the natural resources of Italy permit the growth of such a civilization. The celebrated Greek philosophers would have had their meditations disturbed by living neighbor to Wall Street and Fifth Avenue; but the riches available to Greece did not render Wall Street and Fifth Avenue possible.

The nature of our physical environment has had a great influence in shaping the social ideals of our own times. The untold wealth of America's **Physical factors influencing American development.** natural resources has exerted a constant appeal to the economic impulses of our people. A rich soil has stood ready to return bountiful harvests with little labor; mines of coal, iron, gold, and other minerals and metals have called for development; immense forests have been waiting for the mill and the factory; great natural waterways have invited to commerce; diversity of products and of climate has made many different industries possible. Added to this, an age of science and invention supplied the tools and equipment for exploitation of these great opportunities. A virile, energetic, and cosmopolitan people were at hand to undertake the conquest of all this material wealth. The response to the stimulus afforded by such conditions has been a very natural one, and has simply

followed in the line of least resistance. Social evolution has taken its direction from the most insistent and effective stimuli.

If it is asked why we do not in our civilization of the present have our Shakespeares and our Miltos, our

Development takes line of most effective stimulus. Raphaels and our Leonardos, the answer is that it is entirely probable, or rather very certain, that we do have them. The difference is that we are making them into

inventors and financiers, into captains of industry and scientists. Man's inherent powers cover many lines of development and extend to many kinds of achievement. And those powers that are most demanded and stimulated are the ones that come to fruition. We are to-day developing in our youth what our material resources make possible and what our social ideals are calling forth. Our age is material and industrial, rather than philosophical and artistic. The billion-dollar trust, the ten-thousand-mile railway line, and the fifty-story office building are insistent, if not obtrusive, facts of our civilization. These things tend to fix the standard, fire the ambition, and set the goal for endeavor. The response but follows the most pressing line of stimuli, and development in this direction is the inevitable result.

Evidences of the materialistic attitude of our civilization can be discerned even in the schools. Our people

American materialism. are proud of their schools and lavish much money upon them. All administrators of educational systems find, however, that it is greatly easier to secure financial appropriations for the extension of school-houses and equipment than for the payment of adequate salaries to teachers. Society is most ready to pay for values that can be seen. During the

last generation, the material side of education has vastly improved. Buildings, laboratories, libraries, gymnasiums, and equipment of all sorts have been generously supplied from the public purse. But during this period of rapid advance in the material basis, the personal side of education has not been given the same support. Teachers have been kept on what is barely a living wage, and no adequate preparation for teaching is yet demanded. The result has been that while the brick-and-mortar aspect of education has made great progress, the spiritual side has lagged far behind.

We may say, then, that the social matrix, the atmosphere, in which each new generation receives the stimuli

Sum of environmental influences a complex. necessary to their development comes primarily from the civilization round about them. The social institutions, the manners and customs of the people, the nature and organization of the vocations, the habits of mind, the interests, and ambitions of their people are the great determining factors which go to shape their lives. On the other hand, the character of the soil, the streams, the mountain ranges, the oceans and deserts, the sky and the climate, have all built themselves into the social structure of which these things are the basis.

These two agencies, the physical and the social, are inseparable. Their influence can be traced in the evolution

The social the immediate point of contact. of all the great nations of history, and it is constantly at work in moulding the development of the individual. Yet it must not be forgotten that the social is, after all, the immediate point of contact of the individual with his environment. Richness of soil, productivity of mines, and availability of lakes and streams as highways of

commerce, mean nothing to the child until they are interpreted to him through the values put upon them by society. It is the social stimulus that must finally act as the chief factor in calling forth the powers and capacities of the individual. Further, the development of the individual takes place through a growing, reconstructing process of experience. Experience must have content; and the experience content is social. Both the stimulus, therefore, that prompts the response and the experience that results therefrom are ultimately social in their nature.

Two sources of social stimuli. The social stimuli affecting the individual come to him in two ways: (1) from what may be called *unorganized* sources, or those having their origin in the heterogeneous activities of the social process; and (2) from the *organized* source that we call the school.

Unorganized sources. It is, of course, obvious that the activities of the various social institutions and vocations are not organized with reference to the development and training of the child. They rather have in view the carrying out of the social aims of the adults who participate as members in the social process. These unorganized agencies, nevertheless, constitute one of the most important, if not the most important, educational influence in the life of the child. That their educational effects are not specifically anticipated and planned by society, and that they are not consciously received by the individual, does not lessen their efficiency.

Powerful educational agencies. The home, for example, is not organized or its activities directed primarily for the training of the child; yet the atmosphere of the home, its moral and religious standards, the type of its

social intercourse, and the nature of the fundamental relations that obtain there are the most important factors going to prepare the individual for his present or his future relations to the home. Similarly, the religious, civic, and industrial activities of society do not have as their end the education of the young; but the most powerful influences going to prepare the individual for participation in these activities are the influences resulting to the child from his contact with these phases of the social process. Or, again, the avocations and recreative activities of society are not shaped for their effects on the child; yet, out of his contact with the plays and games, and the social diversions and amusements of his community, the individual develops his avocational standards and tastes, and learns the technique of play and diversion.

The great effectiveness of the stimuli coming from the unorganized agencies of education is due, first of all, to

Source of
effectiveness
found in
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their close and vital relation to the experience of the child. Their appeal is very immediate and concrete. There is nothing distant and forced about them. Each activity

of home or vocation is planned and carried out with reference to needs and desires that form a vital part of the experience-process. All is continuous and related; no gaps are left in experience. There is not only a reason, but a necessity for every activity. Means are never divorced from ends, for the end is consciously in view and its achievement sought. Hence interest is direct and effort is supported by desire.

The unorganized stimuli to development also possess a great advantage through the continuity of their influence upon the life of the individual. They begin to play upon

him at birth and do not cease until death. Before he goes to school the individual has secured an amount of

Also through continuity of influence. education that he could ill afford to exchange for all that he will receive after that time. While he is going to school, also, the unorganized stimuli continue their effect, and vie with the school in directing the development of the child. And even after the school has done its part, and the individual is engaged in the wider activities of the social process, these unorganized forces are still operating to shape the experience-process. In a very real sense, therefore, all the world is a school and the whole of life is education.

Through the school, society effects an organization of the stimuli that are to be brought to bear upon the de-

The school instrument of education. velopment of the individual. By selecting the most necessary stimuli and assembling them within the activities of the school, it is no longer left to chance to insure that the stimuli requisite to development will present themselves, and at the right time and in the right order. In the school, society has invented an instrument for the carrying out of its purpose with reference to the education of the new generation. Through this means any desired end in the development of the individual may be approximately reached.

The primary function of the school is therefore easily defined; *it is to present stimuli to the child.* These stimuli

Function of the school to present stimuli. are to be of such nature that they shall result in responses leading to development. Stated differently, the school is to direct the child's growing experience in such a way that it shall articulate with the wider social ex-

perience-process. In order to this result, the control exercised by the school over the child's experience must be chiefly an indirect control. That is to say, control over the individual is to be exercised through controlling the stimuli that determine his responses. If certain lines of activity are desired, the stimuli appealing to this line of activity are to be presented; if, on the other hand, certain lines of activity are to be suppressed, the stimuli prompting to these lines are to be eliminated. Further, whatever acts are to be conserved as a part of the system of responses of the individual are to be rewarded through social approval, and other means of causing pleasure to attach to them. Similarly, acts that are to be prevented as a part of the habitual response of the individual are to be suppressed through social disapproval, and other forms of unpleasant experience that are made to attach to them. Direction of the child's development through control of the situations that eventuate in conduct leaves the way open to the individual for self-activity and for cultivation in the motives and technique of self-control. Any other form of direction exercised over the experience of the child substitutes artificial motives for conduct and fails to lead to a full development of the self.

The control by the school over the stimuli effective in shaping the child's development is exerted (1) through

Means by
which the
school exerts
influence.

the intellectual organization of the school as defined in the *curriculum*, and (2) in the social organization of the school as manifested in its organic *unity with society*. A further analysis of these two factors will now follow.

REFERENCES

Betts, *The Mind and Its Education*, ch. XVI; Bolton, *Principles of Education*, chs. XVI, XXI-XXIII; Dewey, *How We Think*; Fiske, *Meaning of Infancy*; Halleck, *Education of the Central Nervous System*; James, *Talks to Teachers*, chs. III-VII; Morgan, *Animal Behavior*, chs. III-V; Swift, *Mind in the Making*; Tarde, *Laws of Imitation*, ch. VI; Thorndike, *Educational Psychology*.

CHAPTER X

THE CURRICULUM

I. The Social Origin of the Curriculum

Society offers to each new generation the aggregate fruits of its own achievements. From the beginning of human history, man has been accumulating culture and civilization. Out of the daily lives of the millions of peoples of all times—out of their toil and suffering, their hopes and dreams and deeds, have come some permanent values. Some phases of experience have been tried and tested until they have been found typical and fundamental. Culture and civilization consist of these valuable and more or less permanent aspects of social experience.

That which remains to us as culture is, therefore, the sum total of social experience up to this time, with the mistakes and failures left out, and with that which was only temporary forgotten. And much of the experience of every generation must thus fall by the way. For no matter how fruitfully man lives, or how vital the experience-process, a considerable proportion of his experience has but partial and temporary value. Much that goes on in the social process lacks significance for any other social situation than that of which it forms a part, and hence cannot be transferred to other times and places. Some phases of social activity may lack value

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culture.

Culture the
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experience.

even for their own day, and thus not be worth transmitting to others. A great deal of that which seems most valuable and typical to one age must of necessity possess less value, or even no value, for later generations who have grown away from the older concepts and values.

For example, much of what was called science in the older day has been proved false, and we no longer study it. It has no relation to our life of to-day except having supplied a stepping-stone for our higher knowledge. Astrology gave way to astronomy; the old empirical chemistry has been supplanted by the modern exact science. Much that was taught in theology has disappeared or become the basis of new concepts. Matter that was prized as vital history has been forgotten. Tongues that prided themselves on their power to sway the world have ceased. Literary productions hailed as final in finish, form, and content are no longer read. Institutions have arisen, lived their little day, and disappeared. Only time and change are permanent. These are the test of all things, the measure of all permanent values.

This does not imply, however, that nothing has value as experience except that which can withstand the ravages of time and change. The pseudoscience of ancient times did supply the foundation for later scientific achievement. The literature of other ages than the Victorian, even if it has not come down to us as a permanent contribution, served the generations that produced it and became the foundation for other literary eras. Slavery and feudalism have passed away, but they seem to have been necessary stages of social evolution. Monarchical forms of government are just disappearing, but they were the only fitting

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our higher knowledge.

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ages of time and change. The pseudoscience of ancient times did supply the foundation for later scientific achievement.

form at certain stages of social progress. Generalizing these facts, we may say that in any advancing society old knowledge, old philosophies, and old culture must constantly be in a state of reconstruction that shall keep pace with the race's progress. Without the old the new could not come into existence, yet the old must ever give way to the new. Just as youth is intolerant of age, and thinks that youth has the greater wisdom and the greater power, so the present is likely to be intolerant of the past, forgetting its great achievements and the debt that each generation owes to those that have put it into possession of the tools of progress.

But even with the dropping out of the phases of culture that are ephemeral or unfit, there still remains a vast

The vast amount of culture remaining. amount as the result of ages of accumulation, and this amount is steadily and rapidly increasing with every generation. Literatures in many tongues have crystallized man's best thoughts, his deepest feeling, and his most sublime aspiration. Art has made permanent his greatest concepts. Science has pried into so many lines that no one person knows more than an infinitesimal part of the whole. History sums up the lessons of all times and peoples. And so we might go on until we had catalogued all the points of contact of man with his environment. At every point he has been learning; experience has been growing; values have been taking form. Here in a poem, there in a mathematical formula, again in a scientific law, at another time in a picture or a statue, or in the organization of an institution, the invention of a machine, the perfecting of a philosophy, or the evolution of a religion, man has been organizing and formulating the most vital phases of his experience. And this is what

each generation offers to the one that follows, thus putting into its possession the incalculable riches of the experience of countless millions of men. Nor can the new generation refuse the heritage; it is theirs. They must have it for their own development, and must conserve it for those that are to come after.

It is, of course, impossible for the child to assimilate to his experience all, or even any large part, of this great

The curriculum a selection from this material. mass of social culture. It is necessary, therefore, to make some more or less arbitrary selection from the accumulated social

experience for the use of the child in introducing him to the achievement of the race. The phases of social experience set out for the individual to recapitulate is called the curriculum. It consists of society's selection of the best from its own achievements set apart and organized especially for the child. It is the gateway through which the individual is to pass into a fuller consciousness of the collective life and achievements of his race.

II. The Function of the Curriculum

The curriculum develops the social consciousness of the individual. The child is lacking in perspective. He

Social consciousness of individual developed through the curriculum. sees himself only in his relation to the present and to those objects whose activities immediately touch his own experience. The distant in time and place is either unknown or lacking in reality. The concept has not

yet arisen of the great succession of human generations of which his own life is a part. The sphere of social relations is very narrow, and their mutual interdependence

has not entered the child's consciousness. The community of interests and the continuity of social experience do not yet appeal to him or impress him.

All this could not well be otherwise, since the stimuli acting upon the child at the beginning are wholly local and immediate. The distant, the past, and the future do not greatly concern him, since they do not relate directly to his experiences. It is the present that creates the situations demanding his interest and activities; in a very true sense, therefore, the child lives, moves, and has his being in the present.

A large part of the development of the individual is concerned with the broadening of this point of view.

Development requires this socialization. Narrowness, provincialism, and immediacy are signs of imperfect or retarded social growth. The sense of time must come to include a long past and a limitless future, and the sense of terrestrial space to extend beyond the confines of community or nation. Nor are these to be conceived as empty duration and mere physical distance, but as filled with human generations, each a link in the great chain of life that began at the beginning and will go on till the end. And with this concept must rise the feeling of kinship, the sense of relationship, with all that have come before and that will come after. The great opportunities open to the individual to-day are to be accepted as a gift from other times and people. The flag is to represent not only the freedom of our present, but also the treasure, the sacrifice, and the suffering of those who gave the flag and are maintaining its principles. Literature, art, and science; all inventions and discoveries; the wealth of spiritual culture and the comforts of material civilization are to be accepted as bonds of human brotherhood.

With the growth of this concept, the individual will be broadened in his social interests and sympathies. From being a member of a particular family, he will grow into a member of a state, a nation, a race. He will become socialized.

The basis of any deep sense of relationship is the realization of a common experience. We expect sympathy

**Common
experience
the basis of
sense of
relationship.** and understanding only from those who have had experiences similar to our own. Those who have together gone through common hardships or dangers thereafter feel a bond of relationship. Persons uniting

in a common cause find themselves drawn closer together personally. Soldiers feel a special interest in soldiers, artists in artists, and inventors in inventors. Membership in a common society, fraternal order, or church serves as a ground for personal acquaintance and relationship. Even so slight a basis of common experience as that of having had ancestors who were in the war of the Revolution creates the feeling of relationship sufficient for the founding of an organization united only by this bond. Common experience is therefore the meeting-ground where the consciousness of relationship and comradeship emerges. It is the ground upon which the individual must meet society and come to realize his part in the drama that is going on about him.

Through the curriculum society places before the child an opportunity for common experience with the

**Common
experience
through the
curriculum.** race. The phases of culture that have been found of most value in social evolution, and the phases that are most vitally related to the social process of the present day, are organized and placed before the child that he may incor-

porate them in his own experience. Through mastering in his experience what has been wrought out in the centuries of struggle and growth on the part of his race, the child comes to feel himself of a kind with those who lived what he has to learn. He thereby comes to conceive himself as one of the great family of human kind, and catches step with the spirit of progress in society.

It is through mastering the technique of the manual arts, and learning the history of their use among other peoples, that the child enters into the experience of the workers of all time and feels himself as one with them. Through the study of geography he rediscovers the continents and the oceans, the natural resources of the earth, and all that goes to make the earth the home of man, thus epitomizing in his experience what the race has been ages in accomplishing. In his study of science, of art, of institutions, the opportunity is the same. The child recapitulates in brief the achievements of society, and through this common experience develops his social consciousness until it can conceive man in the large and feel kinship with all.

The curriculum stimulates the activities leading to development. The child owes his original nature to heredity; his powers and capacities come to him from the race, and therefore bear racial characteristics. This implies that ontogeny follows the trend of phylogeny; the individual develops under the same stimuli and according to the same laws that hold for the race. It is true that the individual takes advantage of many short cuts, and possibly even wholly omits many aspects of racial experience. Making allowance for this fact, we may say that the individual develops his powers and capacities by

recapitulating in his experience the typical activities of the race.

Just as the child at birth has implicit in him all the powers and capacities that will be his in the ripeness of adult life, so the race at the dawn of its history had potential in itself all the powers of the race at this meridian of its life. Man has made those potential powers actual through their use in the mastery of his world, and in the process he has achieved the culture that he offers to each new generation. The individual must follow the same course. The child will reach the development of his powers and capacities only through their use in solving in his experience the problems that the race has solved before him—through living in miniature the life that society has lived in large.

Man owes the technique attained by the hand to the problems that have resulted in the evolution of the arts and the handicrafts; the child attains control and manual skill through that part of the curriculum that provides for the manual and industrial arts. Man developed the number concept through meeting those problems of social experience that have resulted in the growth of the science of mathematics; similarly, the child develops his number concept by having reproduced in the curriculum the situations demanding a knowledge of number. Again, man developed much of his ability to think through confronting in his experience the situations whose mastery has given us the sciences; similarly, the child develops his power of thought by rediscovering the typical problems of science supplied by the curriculum.

Development occurs, as we have already seen, only

The child
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In concrete
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experience.

The curriculum broadens the content of experience.

through the reconstruction of experience. But experience is not empty; it must have content. The curriculum immensely increases the content of the child's experience; it also defines to the individual the typical and universal from the experience of society. The content of experience dependent wholly on stimuli coming from the immediately present cannot but be narrow and trivial. Values are distorted, and the trivial and insignificant come to dominate. Through the curriculum the child finds himself in the presence of stimuli coming from all times and peoples. His thought is emancipated; he is freed from the accidents of time and place. His concepts become generalized, and his interests and sympathies correspondingly broadened.

The curriculum leads the individual to adjustment in the social process. We have defined the aim of education

Adjustment in the social process secured through the curriculum.

as that of fitting the individual into the social activities of his time as a positive, contributing force. This is accomplished through cultivating in the child a constantly growing, reconstructing experience increasingly controlled by himself with reference to social needs and demands. This is to say that the experience-process of the individual and that of society shall come more and more to merge, but without the individual losing his identity as an individual in the process.

The chief instrument devised by society for effecting the union between the activities of the individual and

Methods for securing adjustment.

those of society is the curriculum. The curriculum accomplishes this end (1) through the creation of certain attitudes, or standpoints, toward the various social activities; and (2)

through providing the individual with the knowledge and technique required in the typical social activities.

Each individual must have some life-theory, some judgment of social values, an estimate of what is most worth while in experience. He must consider how best to invest his powers in order to achieve the largest returns for himself and society. Above all, he must feel the necessity of making an investment of his powers, of entering fully into his share of the world's work and its play. To accomplish these ends, the individual must have some basis for comparison. He cannot judge from the data supplied by his immediate environment. He must know what mankind has done, what it is now doing, and what lies ahead waiting to be done. He must come into touch with all the broad lines of the world's achievements. He must apprehend the meaning and value of the social institutions, and feel his relation to them. He must see the significance of the vocations through which the work of the world is accomplished and its civilization built. The world's science, its literature, and its art must exert its appeal to his experience.

Only when the individual has thus come into possession of the typical aspects of social culture has he adequate ground for personal decision as to the most desirable and profitable lines for the investment of his own activities. Without such basis, chance, or trivial circumstance is the determining influence, and the individual has little control over the processes of his own experience. He is but a puppet, a cog in the great wheel, the direction of whose turning, even, he does not know and cannot influence.

The curriculum is a powerful factor in shaping the individual's standpoint toward the various social activities and in defining his attitude toward social values. What society puts into the curriculum of its schools finally comes out as national ideals and achievements. Let England decide that the aim of education is to produce a gentleman, polished and elegant of manner, impatient of labor, and more able to spend than to earn his money, and the desired product is easily secured through the public schools of the empire. On the other hand, let Germany determine to inculcate in her youth the spirit of patriotism for a united fatherland, and in a generation she can accomplish the result through the office of her schools. Similarly, our own schools are found to be the most effective agency for teaching the elements of democracy to the millions of foreigners who flock to our shores.

If literary and æsthetic lines of study are not given a place in the curriculum of the schools, a national decline in literature and art may be expected to follow. If scientific subjects are neglected, the nation will soon be found to suffer, by comparison with the nations which emphasize these subjects, in the record of its scientific achievements. Similarly, a curriculum rich in literary, scientific and æsthetic studies, but lacking all industrial and vocational subjects, has a tendency to produce a people who neglect industrial pursuits and seek occupations in the direction taken by their training. Such a society will be at a disadvantage in the economic aspects of its social activities, and will suffer in competition with other nations having a curriculum which includes the industrial and vocational studies.

Social ideals
to be incul-
cated through
the curriculum.

One result of the relative neglect of vocational subjects and the emphasis put upon what have been called dis-

Results from lack of vocational subjects. disciplinary studies in our schools is seen in the tendency for too large a proportion of our educated people to find occupation in lines where the work of the hand is reduced to a minimum. The consequence has been for many people to look upon education as a means of escaping the industries and attaching themselves to the professions or other occupations not requiring manual labor. The effect of this attitude has been to overcrowd nearly all professional lines, clerkships, small mercantile positions, and similar occupations.

A second result of the lack in our curriculum of subjects bearing directly upon the concrete problems of the

Formation of educational caste. social process is a corollary growing out of the result just discussed. This is the widespread notion that education is, except in its rudiments, for the class who do not work with their hands and that it does not belong to the workers. The relation of education to successful participation in the activities of vocation, home, state, or other social institution, is not seen. The outcome of this attitude toward education cannot be other than to produce social caste—the feeling that education is for one class of society, but not for another; that it is for one group of occupations, but does not affect other groups. Thus, the great fundamental aim of education, that of socializing the individual and increasing the force and effectiveness of the social bond, is defeated through the agency of education itself.

It has already been shown that education does not consist in disciplining powers and capacities in the ab-

stract, but in training them to successful functioning in the activities of an immediate social process. Knowledge

The concrete bearing of education. does not exist for its own sake, but to give a basis for control in the real affairs of life.

Culture is not the result of the polishing and refining of a set of intangible attributes of the personality, but consists in developing, balancing, and perfecting the powers and technique of the individual functioning in a fruitful way in social activities.

The concept of the disciplinary functions of the curriculum has prevailed in large degree for several centuries,

Prevalence of disciplinary aim in education. and is even now but slowly giving way before the social concept. Discipline must finally come to be defined as synonymous with increased control on the part of the

individual. The disciplined mind is the one that knows how to meet and solve the problems of a certain field of experience in the best possible way. And in order that the discipline shall be of value to the individual, the field of experience for which the discipline prepares must coincide with the social activities in which he is to engage. Discipline, therefore, not only means power of control, but it implies a control that is so immediate and concrete that it extends to every problem met in the routine of experience, whether this experience be in the home, the shop, the office, the studio, on the farm, or any other form of activity whatever.

Set over against the disciplinary aim of education has been the utility aim. As understood by many, these two

Utility vs. disciplinary aim. aims are not only distinct, but in large degree mutually exclusive and opposed. In the disciplinary concept the emphasis is put upon the *activity* of consciousness, with little reference

to its content. In the utility concept, on the other hand, the chief emphasis is placed on the *content*, or information, side of experience. Stated differently, if the content of experience has no immediate or particular point of contact with the social activities, the educational result is discipline; but if the experience content immediately and directly touches the activities of the social process, the educational result is utility. The final outcome of discipline in education has been vaguely conceived as culture, and that of utility as a kind of practical ability lacking in the elements of culture.

But the relationship between these conflicting concepts is not quite so simple as it would appear from this

Relation between the two aims. statement. True utility is not synonymous with mere information any more than discipline is synonymous with mere activity of mind. It is true that utility rests upon information; the individual must know the field with which his experience has to deal. The content of his experience must be a social content, related to his activities. But mere quantity does not make information useful as a guide to experience and hence does not constitute utility. Information must be organized into a unified body of knowledge capable of functioning as a stimulus and guide to the continuous reconstruction of experience before it becomes utility. It is not packed away as so many facts, or so much acquired technique, but is constantly utilized in adding to the knowledge and skill of the individual in mastering the problems arising from his social activities.

Viewed from this standpoint, there is no fundamental conflict between the concept of discipline and that of utility in education. Or, differently stated, this point of

view eliminates altogether the concept of discipline as an end in education, in so far as it undertakes to separate the

Social efficiency includes disciplinary and utility aims.

educative effects of any activity of consciousness from the content of consciousness. The content of experience becomes the first matter of consideration in education, and the method of organizing this

content in the learning process the next consideration.

The result of effective organization of valuable content in experience is culture. Culture is, therefore, but a name for the entire process, and cannot exist in the absence either of fruitful content or effective organization of experience. The educational concept could without doubt be greatly clarified by dropping out of discussion the three controversial terms, discipline, utility, and culture, no one of which has any accepted definition, and substituting for the vague and overlapping meaning of the three the term *social efficiency*.

Social efficiency means the ability to enter into a progressive social process and do one's part toward advancing the interests of the whole, while at the same time attaining the highest degree of realization for the self. It is the function

Meaning of social efficiency.

of the curriculum to put the individual into possession of the knowledge and technique necessary for the accomplishment of this end.

To illustrate: the relations in the home require not only right attitudes and impulses, but also a basis of

Social efficiency as applied to the home.

knowledge with reference to the particular problems arising in the home. A knowledge of home economics leading to a wise expenditure of money for the support of the home would immeasurably increase its efficiency as a

social institution. A knowledge of certain biological laws and the course of genetic development is essential to the care and rearing of children. An understanding of the rules of hygienic living would greatly decrease the amount of sickness and disease, lower the rate of mortality, and increase efficiency. Knowledge of child nature and the laws of mental development would enable parents to contribute much to the education of their children. These matters deal with some of the greatest and most fundamental values of experience, and their control cannot be left to natural impulse or chance information without grave danger both to the individual and society.

And similarly in the case of other social institutions and activities. Efficient participation requires knowledge and technique. To be a good citizen of the state, one must have a knowledge of the purpose of government, of the machinery of his own government, and the nature of the social problems confronting the state. If one is to stand in right relations to the school and do his part as patron, taxpayer, or official, he requires a comprehension of the nature and aim of education and a knowledge of the organization and functions of the school as the instrument of education. To enter successfully into a vocation, whether industrial, professional, or any other, the individual must have a concept of the place of work in human progress, and a particular knowledge of and technique in the vocation selected. Or, if one is to make fruitful use of the avocations, he must see the relation of avocations to development and efficiency, and learn the technique of the avocations chosen.

And so we might catalogue all the more significant and fundamental phases of social participation, and in each

field we should find that the knowledge required is too complex, or the skill demanded too refined, to leave its acquisition to chance contact of the individual with opportunities for learning it empirically. The curriculum finds one of its greatest functions in equipping the individual for the meeting of social demands.

III. The Content of the Curriculum

The content of the curriculum is to be determined by its function. If, as we have concluded, the function of the curriculum is to bring to consciousness in the individual a sense of social values, to serve as a stimulus to the development of his powers and capacities, and to lead to his adjustment in the social process, then the curriculum must contain the subject-matter that will accomplish these ends. If through the curriculum the child is to learn to judge and appreciate social values, it is evident that these values must be represented in the curriculum; if, through this agency his powers and capacities are to receive the stimuli adequate to their development, then the curriculum must contain the matter that will secure response from the individual; or, if he is to be led to adjustment in the social process, the matter of the curriculum must be of such nature as to create right attitudes toward social values and supply the knowledge and skill necessary to efficient social participation.

Principles determining content of curriculum. We may look upon the curriculum as a series of stepping-stones by which the child mounts from the isolation of individual consciousness and the weakness of undeveloped powers to the fulness of social consciousness

and the strength of ripened powers. It is, therefore, important that the curriculum should present the very cream of social experience and culture. It must be well rounded and balanced, not omitting important phases of subject-matter, nor insisting on an excess of other phases. It must deal with what is significant and fundamental. It must not overwork the child nor crowd his time so full that opportunity is not given to develop a permanent interest in the great lines of culture and secure more than a smattering of knowledge about them. The field of culture from which the selection of the curriculum is to be made is so rich and so broad, and the time of the child for its mastery is so short, that the problem of the content of the curriculum becomes one of the most vital questions connected with education.

With the enormous increase in the amount of material available for the curriculum in modern times, and with the growing concept that it is through the mastery of this culture that the child becomes an efficient member of society, it is not strange that the curriculum has grown greatly richer than in earlier times. Bacon and other philosophers of his day dreamed of and worked upon a pansophic scheme of education—a plan by which the child could accomplish the mastery of all social culture. No such dream is indulged to-day, yet the amount of material organized as a curriculum is rather appalling. Field after field has been opened up, and new subjects have constantly been seeking admission into the curriculum. Old subjects have been loth to give way, and the consequence has been an overcrowding of the curriculum in certain parts of the educational system.

The volume of material available for the curriculum

has resulted in its division into various courses of study, each arranged with reference to the correlation of its subjects and the time required for its completion.

Multiplication of courses and subjects. This has gone on until many high schools now offer courses sufficient to need twelve or even sixteen or twenty years for their mastery, instead of the four years allotted to the high-school work. Colleges are offering a curriculum that would require from twelve to twenty-five years for its completion. Universities are multiplying their courses almost endlessly, so that it would now take some four hundred years to cover the courses of the greatest universities. It has now come to the point, therefore, where there must not only be the selection of a curriculum for our schools, but also a selection within that curriculum suiting it to the capacities and needs of the individual students.

The factors that go to determine the content of the curriculum are chiefly three: (1) *tradition*, (2) *professionalism*, and (3) *social demands*. *Tradition* plays a large part in determining the curriculum. The very fact that education must draw so largely on the past for its material makes it conservative. That which has been found serviceable as educational material in one generation or century has a tendency to carry over to the next generation or century. The old finally becomes sacred through its very antiquity, and he who suggests the elimination from the curriculum of anything which has long held its position is looked upon as an iconoclast, if indeed not as an irreligious and irresponsible meddler. So firmly do these traditional values take hold of the popular imagination that many parents would select one certain profession for their son, not because they think he is best

Influence of tradition in determining curriculum.

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fitted for it, but because in their minds it stands traditionally for larger honor and position. It is not unusual to choose courses of study in the college or the high school in the same way. Nor is it strange that branches that have been long in the curriculum should come to be looked upon as absolutely essential to education; though many who so regard them could probably give little or no reason for this opinion except that such branches have long been studied. The force of tradition exerts its influence in all phases of our experience and proves a valuable balance-wheel to our activities. We need to be saved from too readily giving up the old and tried values for the new. The problem is to save the old without allowing it to block our progress.

It is not meant, therefore, that a branch should be dropped from the curriculum just because it has been long there. The time that a subject has been in the curriculum has little or nothing to do with the question of its remaining there. That question should be decided solely upon the ability of such branch to educate the powers and capacities of the child of to-day for the life of to-day. That the branch has had value, or that it may have value now, will not suffice. It must have greater value than others that are waiting for admission. If it can meet this test, it should be allowed to keep its place; if not, it should give way to more serviceable material.

Text-books as a factor in determining the curriculum. A supplemental factor growing out of the influence of tradition is found in the matter of text-books. It is easy to understand that a subject that has long been taught will be most likely to have a well written series of texts for its use. From generation to generation the new text-book

writers profit by the mistakes as well as the successes of their predecessors, and an excellent series of books is the result. Naturally, this tends to make the teaching of such a branch easier for the teacher and more valuable for the pupil. New subjects in the curriculum must of necessity be under the handicap for a time of relatively poorly organized material and the lack of standardized text-books. This, of course, constitutes no reason for keeping a subject out of the curriculum, since it is only by its use that proper organization and serviceable texts can evolve; but it illustrates an important factor tending toward conservation as against change.

Professionalism is the second great factor going to determine the content of the curriculum. By professional-

Influence of professionalism in determining the curriculum. alism is meant the influence of educators and teachers. This class is looked upon by society as a group of *quasi* experts, whose opinions and advice should carry weight.

And such should be the case. Education should be as much a profession as medicine or law, and a teacher's advice upon an educational problem should be as trustworthy as a physician's upon a question of medicine or a lawyer's upon a question of law.

There are two great reasons why such is not now the case. First, teachers and educators are not strictly a

Teachers not looked on as professional class. professional class at all, because they lack technical knowledge of society, culture, and the child, and the interrelations of these educational factors. Secondly, it is impossible to test the validity of an educational theory as easily and satisfactorily as that of a medical theory or a theory of jurisprudence, the reason being that the results are so slow in education, and that there are so

many supplemental factors to be taken into account.

Possibly it is this very difficulty in the way of accurate measurement of educational results that makes so many Inexpert criticism plentiful. inexpert critics ready to express their educational convictions. For there is nothing that the average man loves more to do than to publish and defend his own particular educational creed. It therefore comes about that many who would not dare to show their lack of information and grasp in the fields of science or mathematics by writing articles or appearing in public lectures in these fields, rush into print or readily proclaim their educational doctrines with at least as little technical knowledge of the educational factors as they have of science or mathematics. This probably explains why much of the matter printed upon educational theory is without value, and no small part of it actually misleading.

The teachers themselves have comparatively little to say about the curriculum. It is true that there are Teachers say little about curriculum. teachers here and there who are strong enough to make their views felt. By far the greater proportion of professional influence, however, is wielded by a class coming to be called "educators." Those of the latter class most responsible for the curriculum consist, for the greater part, of superintendents and principals in the public schools, professors of education and psychology in the higher institutions, and the authorities having to do with admission requirements in the colleges and universities.

One of the greatest professional influences at work in shaping the curriculum in this country during the Influence of the N. E. A. last score of years has been several different groups of educators acting as committees appointed by the National Education Association. Especially important was the report of

the "Committee of Ten," issued in 1894. This report discussed educational values at great length, and recommended a high-school curriculum which received the sanction of the association. Naturally this curriculum served, with but slight modifications, as the type for many schools, and it has not yet fully lost its dominance. Similar committees recommended curriculums for elementary schools, both grade and rural, with like results. The Department of Superintendence of the National Education Association is also a powerful factor in public education, and has had much to do in shaping the curriculum.

The most important professional influence at work in determining the content of the high-school curriculum in recent years has been university and college authorities, acting through the medium of their entrance requirements. It is naturally the ambition of each school of lower grade to articulate with the one next higher. Ability to do this is not only a warrant of the standing of the lower school, but also encourages its graduates to continue their education in an unbroken line. It is also to the interests of the higher institution to secure a perfect articulation of the lower school with itself, for it is in this way that it secures students prepared for the higher work.

The mutual interests of secondary and higher education on matters relating to the articulation of the two associations of college and secondary schools have resulted in the forming of various associations of colleges and secondary schools, having for their purpose the establishment of criteria and methods of admission of high-school graduates into the colleges. As a result of this co-operative work, an approximately uniform

standard of admissions for all higher institutions has been agreed upon, and provision made either for a system of accredited high schools, whose graduates are admitted to the colleges without examination, or for a uniform system of examinations for entrance into the higher institution. In order to accomplish the desired articulation of the lower and the higher schools, it has been necessary for each to modify its curriculum in some degree to meet the other. In this, as in other educational situations, however, the influence of the higher institution has proved the stronger, and the high-school curriculum has been shaped largely in accordance with college requirements.

The departments and schools of education in the higher institutions are exerting an increasing professional influence. This influence is exerted through the membership of their faculties in the various educational associations already discussed; through the publication of educational literature; and even more through shaping the educational standpoint of their students, who are pursuing the study of education as a profession in constantly increasing numbers, and who are rapidly coming to occupy the places of importance in educational affairs.

Social standards and demands are slow in making themselves felt educationally, but they are in the last analysis the final source of authority and power. National ideals come at last to be expressed and conserved in the schools. There are two reasons why social ideals are comparatively slow in shaping the curriculum: First, social ideals are not always clearly formulated; they often are but half conscious to the great mass of society until some leader arises who, by formulating the ideal, brings it to the social conscious-

ness. And it is evident that an ideal but half felt and dimly known cannot exert sufficient compulsion to secure a place in the curriculum. The second reason for the slowness of social ideals in modifying the curriculum is that society does not deal directly and at first hand with the schools; but rather through the medium of a professional class, who are often slow to interpret or respond to a social demand.

It is true that the theory of our educational system provides for small local units, with the social group managing directly their own school affairs.

Social influence not directly applied to education,
But such a condition does not obtain in practice. In the case of the rural schools, the state superintendent usually makes up and sends out a course of study which is to all intents and purposes binding upon the schools. The county superintendents insist upon the state course being followed, and the teachers naturally obey. Without doubt this arrangement gives far better schools than to depend upon each school district to arrange for its own curriculum; but the illustration shows how far the people are from managing their schools directly.

In the grades of the town and city schools the course has been prescribed largely by the superintendent and his principals or assistants. That the school board is legally commissioned with the duty of prescribing a course of study is true; but they, not feeling expert in such matters, are usually ready to sanction without modification whatever curriculum the superintendent proposes.

but indirectly through administrative officers.
The high-school curriculum in the United States has from its inception in 1636 been largely under the control of the colleges and universities. The old Latin grammar

school was confessedly a college preparatory school, and hence had its curriculum dictated by the college. The

Movement toward social control in the United States. next secondary school, the academy, arose as a protest against the narrow curriculum of the grammar school, but the academy also soon fell under the sway of the college and became a preparatory school. In the high school, the "people's college," it was thought that society would have an institution that would respond immediately to the needs and ideals of the people. But after half or three-quarters of a century of existence the high schools, as has already been shown, find themselves very largely college preparatory schools. Many of the middle-sized and smaller ones are straining every nerve to meet the college requirements, even to the neglect of some of the most fundamental branches. The college, being still further removed from immediate contact with social demands, has maintained a curriculum that has been dictated very completely by tradition and professional influence.

The ultimate source of authority in determining the content of the curriculum must lie in the needs and de-

Curriculum must respond to social demand. mands of society. What the social process requires the curriculum must contain. When society outlives old ideals and enters

upon new lines of experience, the curriculum must change in conformity with the new conditions. In all progressive societies, therefore, the curriculum will be in a constant state of reconstruction. If the curriculum proves unable to make this readjustment in accordance with changing social demands, and continues in traditional but outgrown lines, it obstructs instead of furthering social progress. It is not meant by this that

the curriculum will consist of new and different subject-matter for each successive generation. On the contrary the basis of the curriculum will always be old and tried matter. This must needs be the case, for social changes work out slowly, retaining a large measure of the old in what seems to be new; and the curriculum always is conservative, lagging far behind the front in a social movement.

While the social demand is to be the source of authority in determining the curriculum, this does not imply that

Professional factor to be responsive to social. professional influence should have no place. On the contrary, educators and teachers should have far more educational influence than they now possess. They should come

to be looked upon by society as true leaders in education; as experts whose word possesses the weight of authority. But their leadership must not be exerted from a point outside the social process. They must clearly interpret and formulate the social ideal, thereby bringing it fully to the consciousness of society as the educational aim. If educational leadership thus takes its cue from social conditions and needs, there can then be no conflict between the professional and the social ideal, as is now often the case. More than this, the professional educator should himself be an active participant in the social activities of his day, that he may have an effective part in shaping the ideals which he is to carry out in the curriculum and the school.

Problem of selecting studies within curriculum. The selection of studies within an elective curriculum becomes in the higher phases of education hardly less of a problem than the selection of the curriculum. With from two to five times as much material as the child can study

in the high school, and from four to ten times as much as he can study in the college, the matter of selection of studies becomes one of moment.

Too often the choice of studies depends on trivial or accidental considerations. The parents form a notion that the son must have a classical education or the daughter a scientific education without any consideration of the aptitudes of the child or the use to which such knowledge is to be put. Often the advice of older schoolmates who have liked or failed to like certain branches is a determining factor. The personal equation of the teacher is also one of the most potent influences in determining the studies elected. In general there is probably too much of whim and too little consideration of educational values in the selection of subjects.

The election of studies within the curriculum should rest on two broad principles: (1) the importance of the subjects as a part of human culture, and particularly their relation to the social process in which the child is a participant; and (2) the adaptability of the individual's powers and capacities to pursue certain lines of study and secure development from them.

As an illustration of the first principle, it would seem that their importance in the evolution of civilization and in the social activities of the present would demand that the child should have some touch with each of certain great fields of culture. Among these are such groups as the social sciences; the material sciences; language, especially the mother tongue; art and literature; the manual arts; religion and ethics. The particular phase of the fields

Choice often
depends on
trivial factors.

Two principles
for selection
of studies.

Application
of first
principle.

presented will depend upon the application of the second principle, and will, of course, involve the question of the age and advancement of the individual.

With reference to the second principle, it is to be expected that, since the curriculum uses so small a por-

Application of second principle. tion of human culture, not all individuals will possess just the powers and capacities best suited for mastery of the particular phase of culture presented in the curriculum. On the other hand, an individual may possess many excellent powers and capacities not demanded by the curriculum. It is evident, therefore, that a child's response to a curriculum is not a sure test of all his abilities, but only of those that specifically apply to the curriculum offered.

It is often the case, however, that some accident or notion turns a child against a certain line of study which,

Normal capacity includes all fundamental lines. if pursued under other conditions, could easily be mastered. Thoughtless criticism of a study by older people, the tradition of the particular school concerned upon this branch, poor teaching, attempting the

subject too early or before sufficiently prepared—these are some of the things that may handicap a child in a line of study in which he might ultimately come to excel. It is safe to assume at the beginning that every normal individual has capacity for, and will develop an interest in, all the lines of study which are fundamental to the race's progress; and only after the most earnest attempts at mastery under favorable conditions should it be concluded that the failure to grasp a subject is because of a lack in the requisite capacity for such study.

In response to the growing concept of social efficiency instead of mental discipline as the aim of education,

the content of the present-day curriculum has been undergoing marked changes during the last generation.

Current changes in content of curriculum. These changes have been effected in two ways: First, by the modification of the subject-matter within certain branches; and, second, by the addition of new branches of study. As illustrations of the first type of change may be mentioned the new content that has been given to geography, language, physiology, and in less degree, arithmetic. Among the additions to the curriculum are commercial branches, the handicrafts, music, and art. It is fair to say that the entire curriculum has felt the vitalizing influence of the social aim in education, both in its content and in its organization.

Significant as these changes have been, however, we are obliged to concede that even if the disciplinary concept is losing ground, it still exercises the

Disciplinary concept yet rules in curriculum. dominating influence in the curriculum. It is responsible for at least half of the subject-matter given in the grades, and probably for more than half of what is given in the high school. Consider, for example, the arithmetic taught in the grades. First, the amount of it; a large majority of our schools begin training in number in the first school year and continue for the eight years of the elementary school. This is supplemented by at least three years of additional training in mathematics in the high school. Almost one-fourth of the time and energy given to education is thus spent in developing the concept of number. Of course, the mere numbering of the objects or items of our experience does not possess any such relative importance as this proportion would indicate. The only explanation is to be found in the theory of mental discipline.

Much has been done recently to bring the subject-matter of arithmetic closer to the experience of the child,

Arithmetic yet taught as a discipline. yet the greater part of our texts is still made up of problems of difficult analysis rarely or never met with in the actual conditions of life. So clearly is this type of subject-matter calculated to result in discipline instead of efficiency, that a large majority of those who have studied mathematics for eleven or twelve years are without the power to add, multiply, divide, and subtract simple numbers with speed and accuracy. The summing up of a month's household expenses, or the computation of a bill of lumber, would severely test the skill of many intelligent boys and girls who have spent from eight to twelve years under the "discipline" of mathematics.

Desirable changes in arithmetic. The amount of time devoted to arithmetic in the elementary school could probably be reduced one-half not only without any loss in efficiency in number, but with an actual gain. The change would contemplate the elimination of those parts of the subject whose value is intended to be chiefly or wholly disciplinary, and the placing of greater emphasis on the phases relating to home and business activities. This would necessitate dropping out a large proportion of the problems in the complicated forms of analysis, combinations of compound and complex fractions, simple fractions with large or irreducible denominators such as are never met with in business life, various sections of measurements involving technical tables and measures, many parts of percentage not in practical use in the business world, the most of proportion, and nearly all of square and cube root.

The arithmetic taught would then consist of much

practice in the fundamental operations, seeking for both accuracy and speed; the common problems that have to do with the household, the shop, or the farm, correlating these especially with the other work of the school; common and decimal fractions of the denominations usually met in business computations; the elements of percentage as employed in interest and the discounts; and the computation of the common business forms, such as bills, checks, and drafts, and whatever else enters into the business routine of the modern home.

A criticism similar to that of arithmetic may be applied to the subject of grammar as taught in many elementary schools. Much has been done in recent years to emphasize the expression side of language as against its analytical aspect. A great deal of technical grammar is, however, yet given those of tender years. This mode of approach to language violates the natural order of learning, failing to make the best use of the impulses of imitation and expression, which are at their height in childhood, and which constitute the best basis for the attainment of facility and accuracy in speech. Grammar is logic of a rigid type, and, except for the simpler grammatical relations, has no place in the elementary school. Its position there can be defended only from the disciplinary standpoint, and it is so far beyond the grasp of the pupils of this age as to fail of whatever might be claimed for it on this ground if presented at a later stage of development.

The loss of time in the study of language in the elementary school is probably nearly as great as it is in the study of arithmetic. Much effort has been given

to teaching the correct forms of speech at a time when vital content is lacking. Facility in expression cannot

Educational waste in grammar. be secured when there is nothing to express. When the child enters school the language impulse is strong, and further de-

velopment in language depends far more on the acquisition of new ideas and the development of new interests than on instruction in language forms. The child is ready enough to express his thought when he has interesting, vital thought to express; and no amount of training can result in language ability without this subjective demand for expression. Expression cannot be divorced from experience.

The immediate activities of the child, therefore, both in and out of the school, are the basis of all elementary

Experience the basis of language training. language training, and suggest the content of the language course for the elementary school. The handicrafts, nature study,

play, literature in story form, and biography all supply material for language content, providing they call forth a real response that demands expression on the part of the child.

Spoken language precedes written. In the development of the individual as well as in that of the race, spoken language precedes written. The

tongue is better adapted to speech than the hand, hence written forms of expression must be an outgrowth from oral forms.

The first several years of language work should therefore be chiefly oral, and oral work should predominate over written work well toward the end of the elementary school course, if indeed not all the way through. There is grave doubt whether language should be differentiated as a separate study with its own text-

book earlier than the seventh grade, although no doubt it should have a distinct place in the programme earlier than this. During the last two years of the elementary school course, the forms of oral and written composition may well be studied from a text, and the simpler relations of words in the sentence mastered. But here as in the beginning the language content must relate itself to the experience of the individual.

The content of geography has also undergone great changes under the stimulus of the social ideal. Traces of the old catechetical method are still to be found nevertheless, and many children are yet committing to memory the definitions of geographical terms, when the real objects are lying ready at hand for study. The names of many bays, rivers, gulfs, straits, and towns are learned and recited, never again to enter into the experience, while the natural environment of the child, the earth as it touches his own life, is but a dim reality.

The subject of geography should lie very close to the experience of the child. It begins wherever his life touches nature in his environment. It deals with the earth not as a ball of matter revolving around the sun, nor even as the home of man, but as the home of himself and those whom he knows. The content of geography is therefore synonymous with the content of the experience of the child as related to his own interests and activities in so far as they grow out of the earth as his home. Towns and cities begin with the ones nearest at hand. The concept of rivers has its rise in the stream that flows past the child's home. Valleys, mountains, capes, and bays are but modifications of those that lie within

Content of
geography.

Social
basis of
geography.

the circle of personal experience. Generalizations must come to be made, but they must rest upon concrete and particular instances if they are to constitute a reality to the learner. The earth must finally be conceived as the home of man, but it is first conceived as the home of particular men.

The earth as the home of real people, engaged in real activities, gives the cue for the content of geography. What kind of people live in a country, what they work at, what they eat, and how they live in their homes and their schools, what weather they have, and what they wear, how they travel, and speak, and read—these are more vital questions to the child than the names and locations of unimportant streams, towns, capes, and bays. For they are the things that touch his own experience, and hence appeal to his interest. Only as geography is given this social background, and concerns itself with the earth as related to social activities, can it fulfil its function in the elementary school.

Few subjects have been more misused in the elementary curriculum than physiology. It began with a mixture of medical anatomy and advanced physiology, to which were added a few suggestions on hygiene. Later a large amount of *quasi*-scientific matter was added on the effects of narcotics and stimulants. Nearly all of this matter was beyond the comprehension of the child, or else outside his interests and unrelated to his experience. Much of such content has now been dropped out, and matter introduced bearing upon the conditions of right living and the relation of health to physical and mental efficiency.

Recent changes in physiology. Further reform is still needed, however, in the con-

tent of physiology as an elementary school subject. The child is at this age not only in the most critical stage of development, but he is also forming his personal habits as to the care and use of the body. It is, therefore, important that he should learn and come to practice the elementary rules of hygienic living. He should be taught the importance of pure air, and the ways by which it can be secured; the necessity for exercise, and also for rest; how to secure the best conditions for sleep; the necessity for cleanliness, and the way to bathe and care for the body; proper foods, their preparation, care, and manner of eating; the care of the eyes, mouth and nose; the simpler facts of sex and its hygiene; and the treatment of cuts, bruises and burns. Not only are these and similar topics adapted to the child's interest and understanding, but they have a vital bearing upon individual and social efficiency.

The handicrafts are a comparatively recent addition to the curriculum, and hence have been less subject to the disciplinary aim than the older subjects. Indeed they owe their introduction into the curriculum largely to the rise of the social concept of education. The handicrafts now constitute one of the most important and valuable of the elementary-school subjects. At this stage of the child's development the impulse to activity is very strong, and the time is ripe for securing muscular co-ordination and control. The manual activities not only aid greatly in this development of the individual, but they also connect very directly with the child's life outside the school, and thus serve to articulate the activities of the school with the wider social activities of the

home and the community. It is hard to estimate the great socializing effect of this influence.

Music is also one of the later subjects of the curriculum. It not only ministers to a natural impulse of the individual, but develops one of the most important aspects of his nature as relates to social participation. Almost every normal child can be easily taught to sing, and all can be led to enjoy and appreciate music. It is not the function of the school to develop musical artists, but to lay the foundation of interest, knowledge, and skill necessary to the enjoyment of music by all.

Art is at present winning its way into the curriculum. A generation ago it was a pedagogical crime for a child to take time from his lessons to draw a

picture in school. Drawing, painting, and modelling are now an integral part of the curriculum of many schools. Here again the social has triumphed over the disciplinary aim in securing a place for a vital subject. The aesthetic instinct is strong in childhood, and hence this is the time to shape the artistic tastes and standards. Just as in music, it is not the purpose of the school to produce finished artists, but rather to use art as a medium of expression for the child, and to cultivate through a study of pictures, statuary, architecture, and other forms of art, an appreciation for the beautiful.

The secondary school curriculum has from the beginning been shaped largely in accordance with college requirements, and has therefore been dominated by the disciplinary concept. Its recent broadening through the addition either of elective subjects, or elective parallel courses has resulted from the public demand for sub-

Disciplinary
concept in
high-school
curriculum.

jects having a more direct bearing on the social activities. Although so high professional authority as the National Education Association once declared that the college preparatory course is the most fruitful even for pupils not going to college, the social mind has remained unconvinced, and the changes in the curriculum have gone on.

The high schools that have found it possible to add subjects or parallel courses to their curriculum have thereby

Situation in high schools. reduced the proportion of purely disciplinary matter offered, since the greater part

of the additions have been of other than disciplinary character. All such schools still maintain, however, the college preparatory course, and tradition, added to the prestige of admitting its graduates to college, goes to place this course at an advantage as compared with other courses of the curriculum. The large number of somewhat smaller high schools not able to maintain more than one course, but still desirous of meeting college requirements, both for their own reputation and for the advantage of those of their graduates who enter college, offer only the traditional curriculum. All students in these high schools are, of course, obliged to take the studies offered whether they are preparing for college or not. Below this group is yet another large group of still smaller high schools not able to offer more than three, or even two, years of the four-year course. Most of these schools are following out the traditional curriculum of the college entrance requirements as far as their work extends. It is seen from these facts that a very large proportion of the high-school pupils of the country are still to be found in the traditional curriculum of college preparatory studies.

That the college preparatory course contains a large preponderance of disciplinary matter is evident from an analysis of its content. The standard amount of high-school work required by most of the higher institutions of the country is thirty semester units of acceptable subjects. Less uniformity exists as to the nature of subjects required, but still the divergence is not great from the following requirements for entrance into the arts course:

Latin or Greek, . . .	8	Geometry, . . .	3
German or French, . . .	4	Material science, . .	2
English,	6	Social science, . . .	2
Algebra,	3	Elective,	2

The requirements for the science course do not differ essentially except in the requirement of but eight units of foreign language instead of twelve. It should be said, however, that the present tendency is toward greater leniency in the nature of the subjects offered for admission.

But it is seen that the high-school pupil who follows out the course just outlined will have twenty-four out of thirty credits in what may be called formal subjects. For the first four years of Latin or Greek must be spent chiefly in the mastery of the mechanism of the language and very little of social content is possible. The spirit of Greek and Roman social life can be but dimly felt through the difficult medium of declensions, conjugations, syntax, and lexicons. The first two years of German or French must likewise be devoted to the mastery of the form of the language, and little of the literary or social phase is possible. The content of the three years' work in English can be greatly modified according

Large proportion of disciplinary subjects.

to the standpoint of the teacher, but probably at least half of the time is devoted to the linguistic phase of the study as distinct from the literary. Practically all of algebra, and a large proportion of geometry, is of necessity purely formal, dealing with the numbering of things, but not with things themselves.

We find, therefore, approximately three-fourths of the high-school course of this type consisting of formal sub-

Material and social science taught as discipline. ject-matter. To this amount we must make some addition from the material and social sciences growing out of the nature of their teaching.

For example, physics is quite generally presented from the mathematical and abstract standpoint, instead of approaching the subject from the point of view of its relations to life and experience. Botany is often taught as the analysis and classification of plants, and little related to the actual experience of the pupil. The same is true in some degree of chemistry, physiology, and the earth sciences. And history has not infrequently been little more than a skeleton of events and military achievements, and hence failed to enter into the life and spirit of society.

It is not meant to imply in this connection that the formal studies of the high-school curriculum are without

Value of traditional curriculum not social. value as educational material. The point is rather that the content of such subjects is not a social content, and that it does not therefore relate itself directly to social ac-

tivities. The values contained in the traditional curriculum, whatever else they may be, are not primarily social values. And the aim attained by such subjects must be stated in terms of mental discipline rather than social efficiency.

The problem therefore arises as to how far the present curriculum enables the high school to fulfil its aim.

Is the high school fulfilling its function? What is the aim of the high school? Is it that of "disciplining the faculties" of its pupils, or of developing them in social efficiency? Should it seek to prepare the few for college, or to fit the many for the more immediate social activities in which they shall engage?

It is very necessary that we should have schools preparing for college, and that these schools should be easily accessible for all the people. It is fur-

Preparing for college. ther desirable that the college and the preparatory school shall perfectly articulate, so that it may be as easy and natural as possible to pass from the high school to the college. On the other hand, of all the pupils enrolled in the high school at any one time, less than forty per cent graduate. Of those that graduate, a small proportion go to college. A very small minority, therefore, of the high-school pupils are preparing for college. Unless the college preparatory course offers the best type of training for all, it would seem unjust to require the large proportion who will go no further than the high school to take this course.

The boys who close their schooling with the high school are looking toward a career as merchant, farmer, ac-

Preparing for immediate social activities. countant, mechanic, or in some other such vocation; the girls are to become teachers, clerks, and stenographers, or housewives.

Besides the vocational relations, each will function as a member of a family, a community, a church, as a citizen of a state, and in other social capacities. All must, through their education, be fitted into these social activities, with their powers so developed that they

may themselves attain to the fullest possible experience and make the largest contribution to society. In other words, the outcome of their education must be *social efficiency*.

It may well be doubted whether, for example, the mathematical training received in the high school results in greater efficiency in any of these High-school mathematics. Certainly it has no more bearing than the same amount of training from geology, music, or drawing, for the content of the high-school branches of mathematics has no relation to the non-technical social activities. Algebraic formulæ are learned, but they are not applied to the problems of the farm, the home or the shop. The solution of a triangle is mastered, but the method is not employed in computing the slope of a roof, the strain on a girder, or the excavation of a basement.

Similarly, the relation of the study of Latin to social efficiency may be questioned. Its effect in producing Latin. facility in the use of English is urged, but one is justified in questioning whether the same amount of time spent on the study of English itself would not yield far greater returns. The socializing influence of contact with Roman civilization is also presented in defence of Latin; but the spirit of Roman civilization can be approached far more easily and effectively than through the medium of a language so difficult that the student cannot read it after four years of study. Says Emerson, "I should as soon think of swimming across the Charles River when I wish to go to Boston as of reading all my books in the original when I have them rendered for me in my mother tongue." Latin, like mathematics, must finally come back to

formal discipline for its defence as a part of the high-school curriculum, at least for those who are not going on into higher education.

The same criticism may, of course, be made on German or French when pursued but two years, as is usually the case. The pupil gets only a knowledge of grammar and the ability to read haltingly the easiest matter. He has read no literature of value, and is able to read none. He therefore carries with him only the mental effects of his study, for it possesses no social content.

English, which offers so rich a social content, may be so taught as to result chiefly in discipline. It may well be questioned whether English has English. not taken its method too largely from the method of the foreign languages, and been overburdened with grammar. The relation between ability in grammatical analysis and readiness and facility in the use of speech has not yet been established. And even in the teaching of literature, it is possible to make the formal aspect overshadow the content to such an extent that the human interest is lost. It is a fact greatly to be regretted that the high-school course in English has so little influence in molding the taste of the pupils in their reading, and leading them to a love of literature. Here again the social opportunity is often lost through aiming primarily at discipline instead of efficiency.

The high-school curriculum is at present undergoing some significant changes. A growing tendency exists to Changes in high-school subjects. emphasize phases of subject-matter more directly related to the life and occupations of the people. The first of the subjects to feel the effects of this movement have been the ancient

languages. Greek has almost passed away as a high-school branch, and the recent trend is similarly away from Latin, and toward scientific, industrial, and commercial lines. Algebra and geometry have not yet been affected by the changes going on, and will, no doubt, hold their present position for a considerable time. The material and the social sciences are being greatly revitalized both in the content and method through emphasizing those aspects of the subjects that bear most directly on concrete social interests and problems. Indeed, every phase of the curriculum, whatever its content, is in some degree responding to the new social demands being placed upon education.

One effect of these changes in the high-school curriculum will be to increase public interest in this phase of education, and hence ultimately to result in a larger proportion of our population receiving the advantages of secondary schooling. The high school itself is already feeling the influence of increased interest and appreciation on the part of the pupils. This is particularly true of the high-school boys, who are considerably exceeded in numbers by the girls. Careful study has shown that the chief cause of this shortage of boys is caused by a lack of interest in the studies of the traditional high-school curriculum, and the feeling that they have little bearing on practical affairs. The proportion of boys in the high schools of the country is at present slowly on the increase. And the percentage of increase is almost uniformly greatest in those high schools that have introduced the social efficiency courses.

Effects of these socializing tendencies.

All things considered, it seems safe to conclude that the traditional disciplinary high-school curriculum is los-

ing its dominance. The educational concept of society is against it as a preparation for the social activities.

Disciplinary concept losing ground. The pupils themselves have had a taste of other lines of study, and are demanding opportunity for broader and more vital subjects. And, finally, the college, the great bulwark behind which this course has taken refuge for several centuries, is shaping its entrance requirements so as to receive the newer subjects on equal terms with the traditional. Social efficiency as the aim of education is crowding hard the ideal of discipline, and bids fair soon to become the ruling concept throughout the whole range of the curriculum.

When education is conceived as related to the immediate social experience of the individual instead of having

The girl and the high-school curriculum. for its function the "disciplining" of certain "powers," the question is at once raised whether the high-school curriculum should be the same for girls as for boys. This question is not so acute in the grade curriculum, although it has its beginnings as early as the seventh and eighth grades. But during the high-school period boys and girls cease to be just children, and take on qualities of sex. New interests arise, new ambitions are born, new plans are laid—the whole world of experience is reconstructed in accordance with concepts of values not thought of in the elementary school. Education takes on a deeper meaning.

Fundamentals the same for both sexes. The fundamental aspects of the curriculum will, of course, be the same for both sexes; for many of the great lines of experience are the common property of the race, and do not depend on sex. Both sexes alike must come into

possession of the "tools of knowledge," and also the more fundamental aspects of culture. But the most significant basis for the division of labor existing in society is that of sex. Diversity of function is far greater here than in the different vocations. And it is also true that the most vital functions performed by the two sexes are precisely the ones that are possessed by one sex or the other, and not shared in common.

The man becomes the founder and supporter of the home. He seeks the mate, engages in a vocation to supply the economic necessities for the household, and, when necessary battles to defend the home or other social institutions. The woman is the keeper of the home, and largely determines the organization of its activities. She is the bearer of children, their nurse, caretaker, comrade, and teacher. Upon her attitude toward the relations and activities of the home depends a great proportion of its happiness; upon her knowledge and appreciation of aesthetic values depends much of the quality of refinement in the home environment; upon her business ability depends a great part of its economic success; and upon her knowledge of the fundamental truths of procreation and the nurture and training of children rests not only the welfare of the individual, but of society as well.

The girl has never been seriously considered in connection with the curriculum. It was centuries after systematic training for boys had been provided before it was thought necessary to give the girl equal opportunities for education. The girl given a boy's curriculum. She was then admitted into the boy's school, and given the boy's curriculum. When schools were finally

organized specifically for girls, the curriculum from the boy's school was borrowed and made to do service for the girls. This was not so illogical under the disciplinary concept of education, for the content of the matter studied is, under this concept, of minor importance. But under the social-efficiency concept this situation cannot well continue. If the content of education is really related to the successful carrying out of one's life problems, then the content of the girl's curriculum, particularly in the high school, must be different from the boy's curriculum. And this does not involve a question of either sex having a "better" education than the other, as has sometimes been argued; but each will have an education that is *different* from that of the other, and better for its possessor in so far as it prepares for the particular functions of each.

A beginning has been made in thus differentiating the curriculum for the sexes in providing manual training for boys and domestic science for girls. **Differentiation for the sexes.** Further differentiation still needs to be worked out. It is hard to defend an educational policy that will require a girl to spend several of the best years of her life in the mastery of mathematical processes and formulæ which she never employs, and in the acquisition of the linguistic inflections and vocabulary of a language she never uses, and then send her into the most crucial and important experiences of her life in absolute ignorance of the problems to be confronted.

Lines taken by girl's curriculum.

The girl has long since proved her mental ability; where her curriculum differs from that of the boy, it is not to be made easier, but only to be related to the woman's problems

in the home. The girl's curriculum may contain as much science as the boy's; but, without attempting here to differentiate it into its branches, it will teach her concerning foods, both as to their value and preparation; it will give her a knowledge of house sanitation, including heating and ventilation; it will instruct her with reference to the human body, and particularly her own body, together with the laws of physical development, health, and efficiency; it will give her a knowledge of fabrics, including their coloring and wearing qualities; and much other knowledge of immediate value.

In the social sciences also the girl must be as well educated as the boy; but here again, there is room for differentiation. She needs to study economics, but with particular application to the

*Social science
for girls.* home. The economic basis of the home, the relation of income to expenditure, the proportion of expenditure that should go to the different sources of outlay, and the methods of judging values in purchasing for the home are types of applied economics important to the high-school girl.

The girl's curriculum should contain business training, not primarily for the store or the office, but for the

*Business
training.* home. Methods of keeping household accounts, the use of commercial paper, and the ordinary business forms and usages are essential to the manager of the modern home. The courses in domestic science should give the high-school girl an opportunity to learn sewing and various forms of needlework. Here she should also be able to find instruction in the art of serving meals in the family or to guests. She should have opportunity to study household art and decoration, and the art of entertaining.

She should find available thorough training in music from the standpoint of the lover of the beautiful. And similarly for each of the great lines of activity that await her in her experience as central figure in the household. Society demands of the woman that she efficiently manage a home. Women therefore have a social right to the training that will prepare them for this function.

It is true that some of these lines are not at present well organized for instruction, nor are teachers available for them in all the high schools. It is not the intention to recommend an immediate substitution of these lines for the present curriculum, but rather to suggest certain fundamental principles which must ultimately be worked out if the social concept of education is to prevail, and be applied to women as well as men.

IV. The Organization of the Curriculum

The organization of the curriculum is of hardly less importance than its content. The great mass of culture to be mastered by the child cannot successfully be attacked as a miscellaneous aggregate, nor in an unnatural sequence. A thoroughly articulated system of subject-matter adapted to the powers and interests of the individual must be devised. The broad fields of knowledge must be divided into various co-ordinated subjects, and these subjects again subdivided into related branches. The relation of the various branches to the stages of development of the child must be considered and the inter-relations among the studies themselves discovered. The different branches that are to constitute the curriculum

Organization of the curriculum.

are finally to be fitted into the scheme of years, terms, grades, and classes constituting the machinery of the school organization.

In considering the lines of cleavage in the field of social culture which result in the division of the curriculum into studies and branches, it is to be remembered first of all that social experience is primarily a unitary thing, and hence that culture is at root all one unbroken whole. In the concrete life of society, meeting its problems from day to day, there is no separation of science into the organic and the inorganic, the mathematical and the social. There is rather one growing and developing field or mass of knowledge, of which these branches come ultimately to be the different phases or aspects. The genetic view of the curriculum is therefore always a synthetic view. Only after a considerable field of knowledge has been developed can the division into the different branches be made. Not until the product is relatively finished can it be classified on a logical basis into its related parts.

Just as the unity of subject-matter parallels the unity in social life, so the principle governing the division of this subject-matter into studies is identical with the principles of the social process. At the social points of contact with inanimate nature, the inorganic sciences have

Social principles in organization of the curriculum.
their origin; where social experience meets the animate world, the organic sciences emerge; and where in their common activities men find problems arising out of these relations the social sciences have their birth. Each branch of study represents so much organized social culture ready to be translated back into experience through the medium of the child.

In the organization of subject-matter into a curriculum it may be viewed from either one of two stand-

The logical
and the psy-
chological
points of view.

points: the *logical* or the *psychological*. The logical view is the view of the scientist, who takes so much of truth already assembled and arranges it into a consistent and organized body of knowledge. The logical view is not concerned with the processes by which this body of truth was discovered, but seeks for a cross-section of it as it stands. It does not busy itself with explorations seeking new fields, but charts and maps of territory already explored. It is not concerned with processes or partial products, but with completed products. It does not have in mind the learner, but the subject-matter.

On the contrary, the psychological view is the view of the learner, and not of the scientist; of the explorer, and not of the maker of classifications. The psychological view is concerned with the processes by which the culture was developed, and by which it can be transmitted to others. This view follows the irregular deviations of concrete experience at work upon real problems, rather than a classification of experience-products already achieved. It does not deal with theoretically complete products, but with partial products, so that they meet the immediate need. It has for its aim the incorporating of the subject-matter into the experience of the child.

Two points of
view tend to
become the
same.

As the learner grows to maturity and approaches the scientist in development, these two views approach each other and tend to become identical. That is, when the learner has possessed himself of a considerable body of scientific truth and has mastered scientific method, he is

then able so to control his processes of knowledge that he can eliminate much of the empirical cut and try, and can leave out many of the devious wanderings of earlier stages and proceed more directly to results. But the child must be a learner before he can be a scientist; he must approach subject-matter from the psychological point of view before he can approach it from the logical point of view.

Science is ultimately more of a standpoint and a method in approaching subjects than a body of knowl-

**Method aspect
of science.** edge. It is true that science is "a classified body of knowledge." But it is also true that a mere classified body of knowledge divorced from the method that goes with it would not constitute science, but only so much of information. Of course the method cannot be wholly separated from the subject-matter, but what makes a body of truth science is the general principles and concepts which dictate the proper description and classification of facts within this field. In this sense science becomes a mode of thought, an organization of concepts and principles giving control in its particular field.

No external classification of so much scientific truth can therefore constitute a body of subject-matter sci-

**The child
must organize
the material
in his own
mind.** ence to the child. No matter how perfect the co-ordination of matter may be in its arrangement within the branch or how well arranged the branches of study, there can be no coherence of subject-matter until it is effected in the experience of the child. Organization must proceed from within, and cannot be imposed from without. A proper arrangement of the subject-matter will greatly assist in this internal organization, but the

relating is ultimately of the learner. Any attempt to enforce upon the child an organization of subject-matter for which he is not yet ready, or which does not fit into his experience, only results in memoriter work. He may commit the matter to memory, but he will lack the concepts and the principles of organization necessary to unite the facts into a coherent, useful body of knowledge.

The final source of authority for the organization of the curriculum must therefore be found in the nature of

Final source of authority in the child. the child, and not in the scientific classification of the scholar. The character of the child's interests and activities, his natural mode of attack on a field of experience, the method and order of his mind's unfolding, the final meaning and outcome of present attitudes and ambitions—these must determine the arrangement of subjects in the curriculum and the order of procedure within the branches themselves.

It is hardly necessary to say that the present organization of the curriculum does not proceed from this point

Much of present organization violates this principle. of view. The curriculum was originally arranged by scholars who had in mind the fittest organization of so much subject-matter, rather than the best mode of procedure

for the uninitiated learner in approaching this field. Indeed, the child mind was not thought of as being different in its processes from the adult mind; there was only less of it in power and scope. Text-books were not even arranged in a graded series until a century or two ago. The child was expected to begin at whatever point in the subject-matter a logical classification set out as a beginning. The study of language was begun with grammar. And parsing, declensions, conjugations, and

rules of syntax afforded the child his entrance into the subject. Similarly, the rules and principles of arithmetic, instead of concrete and practical exercises in the use of number, introduced the learner to the subject of mathematics.

This order of procedure has been greatly modified in recent years, especially as to the organization of matter *Illustrations of the logical method.* within a particular subject. The application of the principles of induction to teaching has resulted in an attempt at a psychological instead of a logical mode of approach to many of the subjects. In the matter of organizing the subjects themselves into a psychological series in the curriculum, there has been less progress. It is still common to find the more abstract subjects, and those that are farthest from the activities and experience of the child, placed ahead of the more concrete and vital subjects. Thus, in the elementary curriculum, the child is in many schools first given such formal branches as reading, numbers, and writing before the social and industrial activities and nature study. In the high school the more abstract and symbolical sciences frequently precede the concrete and practical ones.

Individual experience, as well as social experience, is a unitary process; there are no gaps and no abrupt breaks. The child begins his life in the *Unitary nature of experience.* midst of concrete social activities of the most immediate and vital nature possible. He deals with real objects, real problems, and real interests. There is nothing distant, abstract, and symbolical in the whole round of his experience. There is no separation of social experience from his own individual experience; it is all one. There is no such thing as culture

or knowledge outside the processes of his own daily life. This is the situation up to the time of entering school.

Now, it is precisely upon the basis of this unity and concreteness of the child's experience that the curriculum should be organized. The child's interests are specifically related to the social activities in which he participates, to people, and to things. Herein is the cue to the core of the curriculum for the elementary school.

The cue to the elementary curriculum.

Social activities at the basis.

Lying closest of all to the social experience of the child is the group of occupational subjects, involving the various handicrafts, drawing, painting, and modelling. Immediately related to the occupations are the subjects having to do with nature and with man; namely, geography in its broadest sense, and history approached largely from the biographical standpoint. Growing out of the necessities of these subjects, language and number will soon be demanded as tools, and later, the formal aspects of science will be approached in the same way. It is not meant, of course, that this is to be a strictly chronological order, as all of these groups will in some degree be represented all the time. It is rather an order of emphasis, a method of genetic procedure.

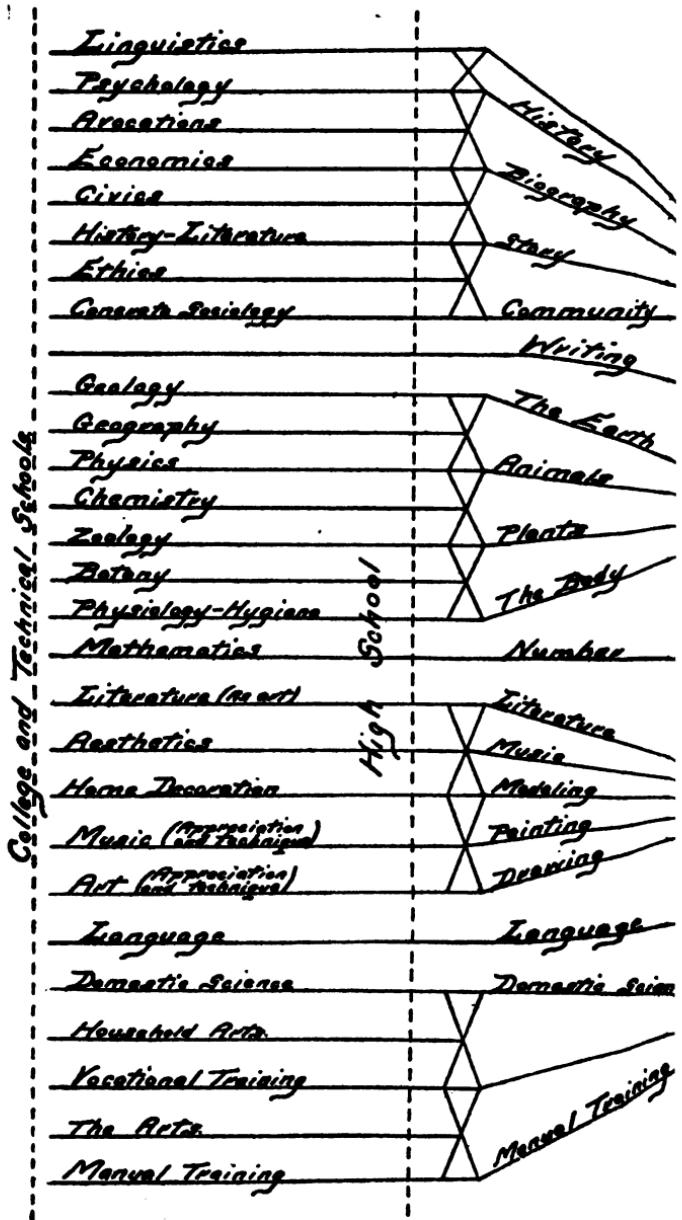
This order is thoroughly in accord with the progressive development of experience in the child. It begins closest to his socialized interests and leads out to his environment on the social and the physical sides. The symbols of language and number, the so-called "tools" of knowledge, lie farthest from the child's immediate interests and experience, and hence are given their true place as a means instead of an end.

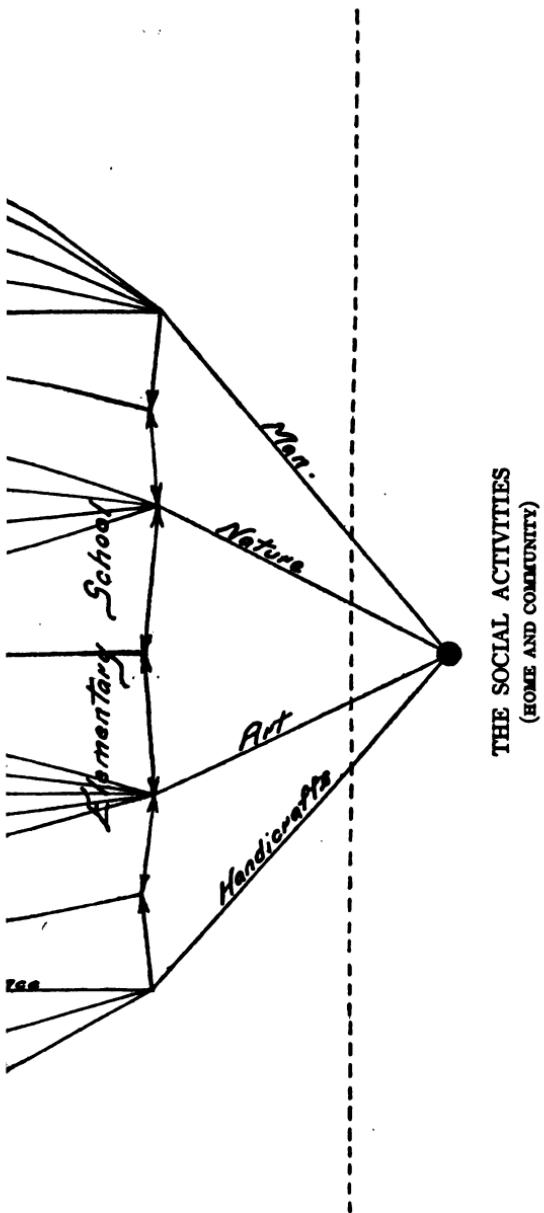
Under the type of organization that introduces the learner to the curriculum through the medium of the "three R's," this is all turned about. Accustomed to social activities based on concrete and immediate interest in people and things, the child is withdrawn from all this life, an absolute break is attempted in his experience, and he is given a set of books full of symbols of language and of number. Up to the time of entering school, the child has never been interested in language as language, but always as a means of expressing himself to those about him with reference to his wishes or needs, or else in interpreting their attitude with reference to himself. He has never been interested in number as number, but always for the sake of real computations dealing with his own playthings or play interests. He has never been interested in using his hand to produce symbols, as in writing, but rather his handicraft has been exercised in constructing playthings or in performing errands and duties about the home. Under the régime of the "three R's," the child is forbidden the normal course of his accustomed experience and required to address himself wholly to a new type of experience, which lacks social activity, lacks immediacy of interests, lacks concreteness, lacks reality. He is given material which is wholly symbolical, in the highest degree abstract, and which has no immediate relation to the run of his daily experience.

But shall we not, then, teach the children to read and write and number? Surely. It is only that manual training, geography, and history are to be the *core* of the curriculum, the centre of immediate activities. If such is the case,

Old type of organization reverses natural order.

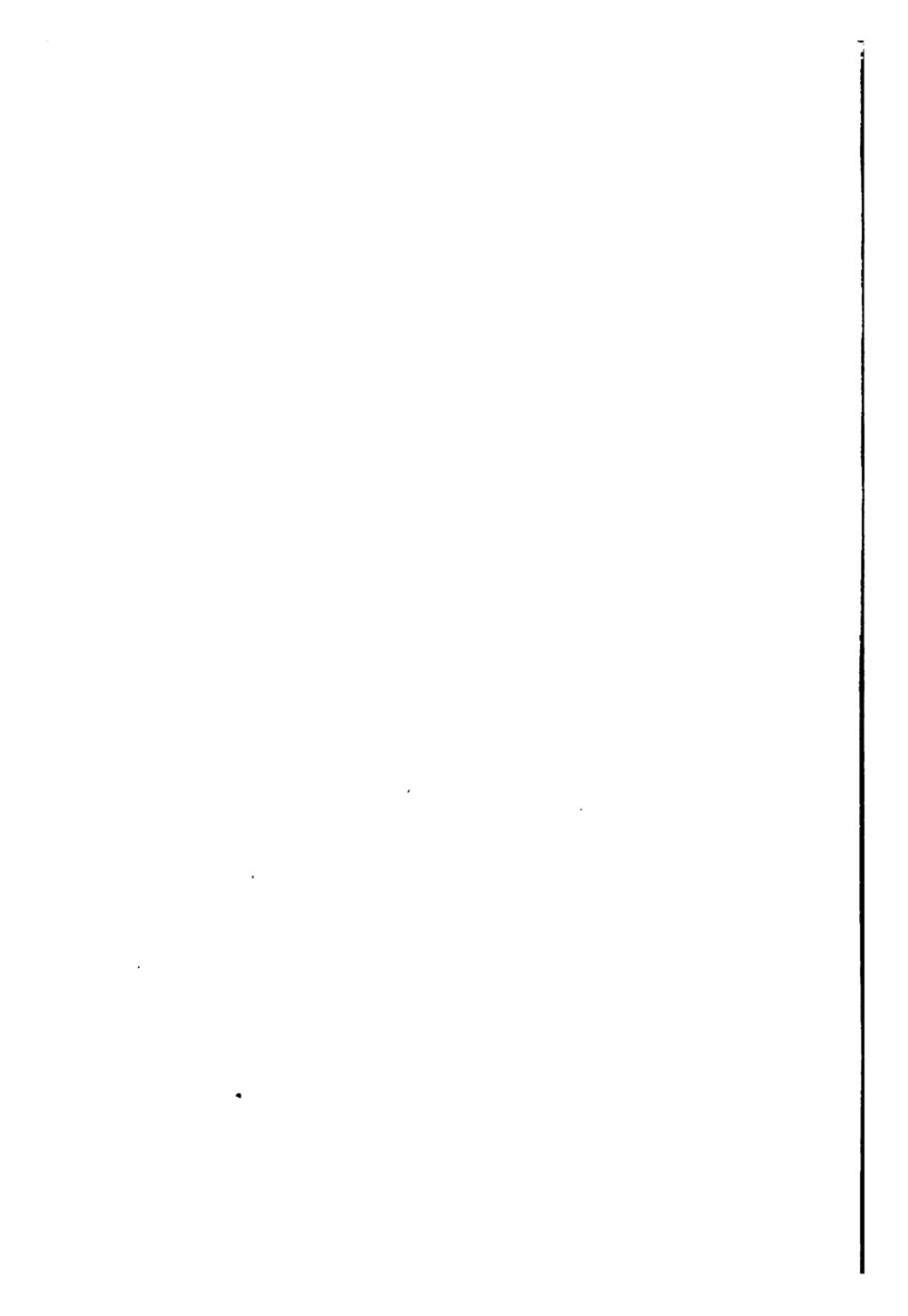
Training in the "tools."





THE SOCIAL ACTIVITIES (HOME AND COMMUNITY)

The diagram shows the social activities of home and community as the starting-point from which radiate the handicrafts, art, and the study of nature and man. These slowly differentiate during the elementary course, and ultimately furnish the basis for the high-school curriculum. Language, number, and writing are shown as inter-related with the other branches of the curriculum, but are looked upon as means rather than as ends. The diagram seeks to indicate as a whole the continuity and organic nature of the curriculum.



the need will soon arise in the experience of the child for a command of reading, of numbers, and of writing. He will require these things in his business. He is hampered without them, hence he wants them. And when the need for a thing is consciously felt, the thing is half achieved. Not but that the child will have to be *taught* reading, and perhaps made to *learn* the multiplication table; but even so, the centre of the motive lies within the demands of his own experience, and the effort will be with better effect; and further, *the symbols will have a vital significance for him as he learns them, which they do not have under the barren system of the "three R's," of the logical curriculum.*

The accompanying diagram represents the organization of a curriculum for the elementary school and the high school based on the psychological mode of procedure. As already stated, the basis of such an arrangement is found in the social activities of the child; hence there is no break in his experience between the activities of the school and those outside. The social activities of the child naturally relate themselves to the handicrafts, to art, to the immediate natural environment, and to the social environment. These four lines are not at first sharply differentiated, but are rather different aspects of a unified experience. In connection with the activities in these subjects, language, number, and writing are required; hence the symbols are mastered and the technique acquired. What may be called the real experience of the fundamental subjects possessing social content is made the basis for the formal experience of the ancillary subjects considered as tools.

As the child advances through the elementary school,

The process of differentiation.

differentiation begins to take place in the various subjects. The handicrafts may subdivide into manual training and domestic science. Art comes to include painting, drawing, modelling, music, and designing. Nature study will involve lessons concerning the human body, plant life, animal life, and the earth as the home of man. The study of society will be carried on through the medium of the story, biography, history, and the social activities of the community. These subjects, with whatever subdivisions and modifications are required, together with language, number, and writing as tools, will therefore constitute the curriculum of the elementary school.

The differentiation that began within the various subjects is carried still further in the high school. Manual

Still further differentiation in the high school.

training expands into its various lines, and may eventuate in specialized vocational training. Domestic science likewise is still

further subdivided, and made to cover the most important phases of the home activities. Art in its various forms may be studied either from the standpoint of its technique or of appreciation. Science is represented by the organic and the inorganic groups, each of which is still further subdivided into its various branches in the order of their concreteness or their relation to the experience of the individual. The field of the social sciences develops into concrete sociology and ethics, history, civics, and economics. Mental science is represented by psychology and by linguistics, or the logical aspect of language. In the high school as in the elementary school the formal subjects, language and mathematics, are looked upon as tools and hence made supplementary to the subjects possessing social content.

The high-school curriculum therefore represents a much higher degree of differentiation than that of the elementary school; it also represents a higher degree of generalization. The concrete and immediate facts of the undifferentiated elementary branches have been thought into general truths and principles. Concepts have evolved, and method and technique of experience been developed. Mere information has been organized into science, and is used as an instrument of control in the further reconstruction of experience. The psychological point of view has come to approach the logical. Education is seen to be synonymous with experience, and social efficiency is conceived as its aim.

The arrangement of branches in the high-school curriculum, like that in the elementary school, is based on the nature of the pupil's experience. The subject-matter must relate itself to the order of the individual's interests and development. Material science should be approached, not through the generalizations and abstractions of physics and chemistry, but through botany, zoology, geology, and physiology, leaving the more formal parts of physics and chemistry for the last. Literature should not begin with the writings of Chaucer, Dryden, and Milton, but with those whose spirit and subject-matter lie closer to the experience of the pupil. History should not start with the earliest period, causing the pupils to study peoples whose governments, industries, and institutions were so different from our own that they lack interest and reality to the learner. The study of civics should begin with the points at which the activities of the state touch the experience of the individual, and

proceed outward to the federal and state organizations. And so on throughout the high-school curriculum. The psychological principle of organization will demand, both in the arrangement of the branches in the course of study and in the organization of the matter within the branch, that we proceed from the concrete to the abstract, and from the immediate to the more distant in the pupil's experience.

REFERENCES

Brown, *The Making of Our Middle Schools*; Butler, *The Meaning of Education*, chs. I, II; Davenport, *Education for Efficiency*; Dewey, *The Child and the Curriculum*; also, *The Educational Situation*; Eliot, *Education for Efficiency*; Hanus, *Beginnings of Industrial Education*; Hollister, *High-School Administration*; Mark, *The New Movement in Education*; Monroe, *History of Education*, chs. VIII-XIV; Russell, *Industrial Arts in the Elementary School*; Snedden, *The Problem of Vocational Training*; Snyder, *Manual Training in the Grades*; Thorndike, *Individual Differences in Education*; Tyler, *Growth and Education*, chs. XI-XVI; *Mathematics in the Elementary School*, Bulletin U. S. Bu. Ed., No. 460; *Mathematics in Secondary Schools*, Bulletin U. S. Bu. Ed., No. 463.

CHAPTER XI

THE SOCIAL ORGANIZATION OF THE SCHOOL

I. The Social Nature of the School

The school, both in its function and its organization, is a social institution. It is the agency selected by society for the socialization of the individual.

Social function of the school. Its curriculum consists of the social culture of the past selected and arranged for the use of the child. Teachers stand as the representatives of society in helping the child to adjust himself to the social activities. The organization of the school must be such as to further the aim of society in socializing the individual. It must embody the social standards and ideals, and stand as a type of the wider social organization of which the school is a part. The problem of the organization of the school therefore involves the principles of social organization in general.

The school is in fact a miniature society. It possesses social coherence, and is united by social bonds the same

The school a social unit. as society in its broader organization. The activities of the school present many situations typical in the activities outside. The demand upon the individual for the subordination of personal preferences and desires with reference to the common good is insistent. Emulation and competition and the opportunity to measure the self by social stand-

ards are always present. Labor is demanded and social penalties are inflicted for laziness or low-grade achievement. Success is rewarded by the approval of public opinion and the elevation of the efficient to positions of leadership. Misdemeanors are punished by social depreciation and by the application of the social law covering the offence.

Nor is the school's social organization something forced upon it from without in violation of its own

Nature of the school determines its organization. nature. The principle of its organization lies deep in the inner nature of the school itself; that is to say, in the nature of the

pupils who constitute the school. Both in his original nature and in his experience the child is social. In his activities outside the school the individual is vitally in touch with social stimuli, and constantly involved in social situations that demand a response of adjustment, effort, and co-operation. The school, at its best, not only presents social situations of the same type as those outside, but is organized and controlled with particular reference to emphasizing the most fundamental and significant social stimuli as motives to adjustment and control on the part of the individual. The inner law of the organization of the school is therefore but the law of the organization of society; and whatever modifications are necessary to adapt this broader law to the school are but changes in its administration and not in its spirit. The great problem in the organization of the school, therefore, is *to make it present in all its complex activities the situations that are typical of the social situations common to the experience of the child.*

II. The Social Spirit of the School

No more important factor exists with reference to the organization of the school than that of the spirit or attitude of the pupils toward the school. For upon this depends in large degree the success of the school both in its social and in its intellectual organization. How do pupils look upon the school: as an opportunity or an imposition? What interest do they feel in its organization and activities? In how far is the school *their* school, and not the teacher's or the district's school? Are the interests of the school identical with the interests of the pupils, or are there two sets of interests here, which, if not antagonistic, are at least not identical? Is the school something rather foreign to the most vital interests and activities of the child, a phase of experience that must perforce be accepted but not valued as a present mode of experience?

It is significant that these questions do not ordinarily arise in the mind of the child with reference to the home, nor in the mind of the adult with reference to the state. These institutions are accepted as a natural and necessary part of experience, and no divorce of interests is felt in connection with their activities. It is to be feared that this cannot be claimed for the school. The same feeling of the unity of aim and spirit does not exist between the child and the school that holds for the home. Too often the school is looked upon by the pupils as an institution rather forced upon them, and not having any particular claim on their loyalty and appreciation. The school often seems to the pupil to have its own aims,

Spirit of
the school.

A negative
attitude often
prevails.

standards, and standpoints, which must in some degree be conformed to, but which are, nevertheless, not the aims, standards, and standpoints of the pupils. It is evident that this situation, in so far as it exists, tends to create a constant condition of strain between the pupil and the school organization.

It is true that this lack of identity of interests between the school and the child is not formulated in any complete and positive way by the pupils themselves. In so far as such a breach exists, it is more a matter of negative spirit, or of indifferent attitude, than of calculated opposition or open rebellion. The teacher is looked upon as possessing certain authority, and as being, within reasonable limits, justified in using it; but at the same time, teachers in their rôle as governor and administrator are quite commonly looked upon as natural enemies of the pupils, and any advantage that may be taken of them is legitimate in the code of many schools. If misdemeanors are committed, it is the business of the teacher to discover the culprits, who are counted to have scored one on the teacher if they escape detection. If lessons are poorly prepared and the teacher does not discover the delinquency, so much the worse for the teacher; the responsibility is his. Growing out of this attitude a barrier has frequently arisen between teacher and pupils in their school relations, which prevents the full identification of interests and the complete response of sympathy and co-operation necessary to the best results in education.

Undoubtedly this attitude, wherever it exists, is a source of great educational waste. It gives the child a wrong impression of the school and of the value of its

**Failure in
co-operation.**

activities. Instead of looking on the school as an opportunity for vital and fruitful experience, it is to the child a place where so much of effort and so many tasks are to be exchanged for a certain number of passing marks, promotions, and diplomas. This cannot but result in a failure to bring all the powers of the individual into action, and hence is a hindrance to development. It also tends to create a feeling of indifference to the subject-matter of the curriculum, and leaves the child without incentive to continue his education.

It would seem that the school should claim the pupil's deepest affection and fullest loyalty. It should appeal

Why lack of loyalty to the school? to him as *his* school in the same sense that his home appeals to him as his home. The welfare and good name of the school should be second in the child's regard only to the welfare and good name of his home. Why is such not more often the case? How does this negative attitude arise?

Whether we succeed in answering this question or not, one thing is certain from the start: the fault does not

The fault not in the child. lie primarily with the child. His very nature leads to loyalty and responsiveness, and these qualities will attach to the school

when the school is able to claim them. The adults organize the school and determine its policy and management; whatever lack of responsiveness there exists on the part of the pupils must be looked for in the organization of the school, and not in the nature of the child. Attitudes do not arise by chance; they grow from a succession of experiences, and take their color and quality from the series of concrete situations in which they have their origin. If we should find the children of a nation

deficient in respect and loyalty for their homes, we should be justified in concluding that the home experience of these children was lacking in certain qualities; similarly, when we find children deficient in responsiveness to their schools, we must seek the explanation in the type of experience afforded by the school.

What is to be found in the organization of the school to explain this seeming defection on the part of many

Factors for which the school is responsible. pupils? One of the two factors affording the explanation has already been discussed; namely, the content and organization of the curriculum.

The disciplinary curriculum, possessing formal instead of social content, is divorced from the interests and activities of the child, and hence his school tasks have little relation to real experience. When this curriculum is organized from the logical point of view instead of from the psychological, it is still further separated from the life of the child. This situation makes it necessary, or at least easy, for the child to conceive two related, but more or less antagonistic, orders: the interests and activities of his own concrete experience and the activities demanded by the school. This divorce in the intellectual organization of the school is being remedied by the modification of the curriculum in its content and organization as already shown. These changes in the curriculum have already gone far enough to warrant the statement that they are responsible for a marked improvement in the spirit of the school in many instances.

The second of the factors upon which the spirit of co-operation on the part of the pupils depends is the social organization of the school. By social organization is meant the organization of the activities and relation-

ships by which the work of the curriculum is carried out. This will include all phases of the machinery of the school, such as classes, grades, and the various matters of routine, and, in addition, the relations between the pupils with each other in the prosecution of their work and also between teachers and pupils. These questions may now be viewed somewhat more in detail.

III. The Organization of the Elementary School

One of the chief desiderata in the education of the child is to provide conditions favoring a continuous and

The school to continue experience in the home. unbroken line of experience. There should be no tangents or split-off particles that become divorced from the main body of

experience. This principle requires that, just as in the intellectual organization of the curriculum the child is to be started at the nearest point of contact with his home and community activities, so in the social organization of the school the highest type of home and community conditions are to be simulated. The school should not appear as a foreign element in the life of the child, but as an integral part of a developing experience.

A primary requisite in giving the school organization a home atmosphere is to give it a home appearance on

Material equipment of the school. the material side. It is true that our school-houses, especially in the cities, are being reasonably well built, both from the practical and the architectural standpoint. Yet the rooms, when they are finished and furnished, have a strangely stiff, barren, and uninteresting appearance. Usually the floor space is well occupied with unshapely

desks fastened in parallel rows to the floor. The walls may be well tinted and adorned with good pictures, but the entire effect of the room is far from being that of a place to live. If it is said that the school-room is not a living-room, but a workshop, then we must answer that the typical school-room does not look even like a workshop, but only like a place to sit in rows while one reads books.

The problem is rendered all the more serious by the fact that in many schools, especially outside the cities, **Poor buildings and furnishings.** the buildings are poor, and little attention is given to making the rooms attractive. The desks are often scarred and dirty, and the floors not well kept; the walls harshly tinted or soiled and discolored, and decorations either lacking or not in good taste. To say that many children find conditions better in the school than they are accustomed to in their homes does not answer the question. Society should in its schools set standards and inculcate ideals that are measured by the best of its membership, and not by the worst. It is one of the anomalies, explained only by the fact of social inertia, that so many parents who surround their children with an environment of taste and artistic excellence in the home are willing to have them spend almost half of their time during the formative period of their lives in surroundings lacking most of the qualities that make the home attractive.

School equipment lags behind. Tradition is an important element in determining the type of our school-rooms and equipment. Our schools originated in a time of poverty and forced economy. There was no money to equip the school better than was done, and

indeed the school was as well furnished as the home. Further, under the older concept of education, there was little need for equipment other than desks, since the study of books constituted the sole function of the school. We have greatly changed our concepts of education, but have not fully kept pace in supplying the means for their realization.

One of the first steps necessary in changing the atmosphere of the school to a freer social atmosphere is to re-

Too many pupils to the teacher. due the number of pupils assigned to a teacher and to a school-room. A group of forty children cannot constitute a family and would only degenerate into a mob if given the same degree of freedom as in the home. Here we at once encounter the question of the economic basis of our schools. A society cannot put more than a fair proportion of its wealth into the education of its young. There are numerous lines of economic expenditure absolutely demanded of society in addition to that of education. The resources of the country must be developed and its industries extended; a system of national defence must be provided; government must be supported; homes and churches must be maintained, and many other lines of activity carried out.

It may well be seriously questioned, however, whether America is putting a large enough proportion of her

Financial support. wealth into education. It is at least certain that, instead of increasing the proportion, as might be expected of a highly intelligent democratic society, we are actually expending a smaller proportion of our wealth on education than we were a generation ago, and far less than in the earlier stages of our history. A people that expends twice as

much for its tobacco as for the current expenses of public education can hardly be said to be draining the public purse for its schools.

The large number of pupils assigned to each teacher also seems to necessitate a more or less rigid division into classes and grades. Not only are forty children too many for a true family, but they are also too many for a good working group; hence they must be taught largely in mass. There is no special reason, except that of economic expediency, why pupils should follow each other through the curriculum just a year, or even half a year, apart. Likewise, the same reason must be invoked to explain why a child who can do a certain section of work in three months should be kept upon it four and a half months because that is the speed of the average of his class; or, on the other hand, why one who requires six months for it should be passed over it in the regular time.

It is true that mental measurements have shown that a very large proportion of children fall within reasonably narrow limits of school ability. It is not to be forgotten, however, that these measures were made upon children who had already been subjected to the levelling process of general class instruction. It is also probable that in not adequately caring for the interests of the exceptionally able child an occasional genius and not a few persons of high-grade ability are lost to society.

Other limitations. The disadvantages coming from the close grading and formation of classes rendered almost necessary by the large number of pupils taught by one teacher are accompanied by other disadvantages connected with the preservation

of order and quiet in the room. The highly desirable freedom and spontaneity that would be suitable in a small group of children would rapidly become riot and disorder in a room full. The spirit of the crowd takes hold in the larger group, and renders restraints more necessary and harder to apply. Thus the problem of control with reference to movements and acts perfectly harmless in themselves, but constituting an offence against school regulations necessary because of the number of pupils, becomes one of the chief sources of difficulty in many schools. The result is not only a condition of strain between teacher and pupils, but a limitation upon the pupils which becomes irksome, if not finally a menace, to physical health and development.

The massing of children together in large numbers under one teacher also limits the opportunities for group and co-operative work. Many of the school activities could be carried on to good advantage by small groups working together under the suggestion of the teacher and without the formal restraints necessary with the larger numbers. Such is the case with the handicrafts, geography, and various lines of concrete elementary science, drawing, and other subjects. In schools where agriculture and gardening are taught, it is highly desirable to secure co-operative participation by the pupils. Such co-operation is necessary not only from the standpoint of administering the course, but also as a counterbalance against the strongly individualistic influence of text-book work in the training of the child. For the spirit of co-operation, the give and take required in all lines of social activity is best developed through exer-

**Massing
prevents
co-operative
work.**

cising these very qualities in the real stress of actual experience.

Few factors are more influential in shaping the attitude of the pupils toward the school than the spirit shown toward it by their parents and others in the community. The child imitates his standards quite as readily as his manners. Thoughtless, irrelevant, and half-meant criticism of the school has a tendency to undermine the child's confidence in it, and hence to weaken his loyalty toward it. The efficiency of the elementary school in particular could be immensely increased by the sympathetic co-operation of the patrons. One of the problems in the organization of the school is, therefore, to secure co-operation. It is not enough to say that the parents should have enough interest in the school to offer their full co-operation without further incentive than the welfare of their children. Social problems must be taken as they are found; and the fact is that patrons have very little knowledge of, or touch with, the schools.

But this seeming lack of interest on the part of parents must not be misinterpreted. The American people deeply believe, at least in theory, in the value of education. The chief difficulty apparent has been that, under the older concept of education, the work of the school seemed so far divorced from the interests of the home and the shop or the store, that there was little point of contact between the experience of the parent and what was going on in the school. The consequence was that parents did not feel that they understood fully the activities of the school or were competent to judge them. They believed that

it was worth while to educate the child in what the school offered, but concerning the process of education going on in the school they felt themselves unable to understand or advise.

Since the introduction of studies more closely related to the social activities, this attitude on the part of the *Influence of the social concept.* patrons of the schools has been rapidly disappearing. It has been found that parents freely come to the school to inspect the work done in manual training, domestic science, agriculture, and allied lines. Here are fields close enough to the actual affairs in which parents are themselves engaged to make them feel interested in the subjects. Moreover, parents know enough about these fields to be able to judge the efficiency of the work being done in them.

A further step lies just ahead in the social organization of the elementary school; this is to make the school *The school as a community centre.* the social and intellectual centre for the patronizing community. This problem is already well toward solution in several of the larger cities of the country, notably in New York. Thousands of smaller cities and towns and rural communities have not yet discovered the advantage of making the school building the neighborhood centre. It is not too much to believe that the school-house of the future will have an audience room capable of seating several hundred people, and one or more reception-rooms for social purposes in addition to the regular equipment of shops, laboratories, reading-rooms, gymnasiums, and the like. When the patrons go to the school-house as a matter of course for their clubs and societies, for their lectures and entertainments, and occasionally for their

social functions, the problem of the divorcement of the school from the home and community spirit will be well toward settlement.

And what is more natural than that the centre for the education of the young should also be the centre for continuing the education of the elders. On the other hand, what is farther from a wise educational policy on the part of society than to make a large and permanent investment in buildings and equipment for educational purposes, and then lock them up for eighteen hours out of every day during three-quarters of the year and all the time during the remainder of the year? That the type of school buildings would need to be modified somewhat to meet this wider sphere of usefulness is true, as has already been suggested, but the educational benefits would be out of all proportion to the additional cost.

The wider concept of the social organization of the school has already resulted in offering the advantage of

Extension of the functions of the school. the school in the evening to those who are obliged to work during the day, but who desire to continue their education.

The evening school has become a regular part of the educational system in most of the larger cities, and will no doubt be extended as occasion requires. A more recent line of extension has been in the direction of vacation schools. While these schools differ much in the character of the work offered during the summer months, one general principle seems to underlie their aim; namely, to afford the child an opportunity for the pursuit of interesting and profitable lines of study not available in connection with the pupil's work of the regular year. This work constitutes, therefore, a change, and much

of it a recreation. Prominent among the vacation subjects are the various handicrafts, domestic science, art, nature study, and physical training. These schools have been enthusiastically received both by pupils and patrons, and bid fair to become an integral part of our educational system.

IV. The Organization of the High School

The problems of high-school organization are identical at many points with the problems of organization presented by the elementary school. In both instances it is to be remembered that the school, while it exists for the ultimate purpose of preparing children for social efficiency as adults, must primarily exist for the child as he lives to-day's life here and now. That is to say, the only way to prepare for ultimate efficiency is to make sure that the individual lives efficiently in the present. True, this present is never to be understood as complete in itself, but always in the light of what it is moving toward; the interests and attitudes of the child are never an end in themselves, but are to be interpreted as related to a final outcome in experience. Giving the present this broader meaning, then, we may say that the basis of the social organization of both elementary and high school is the present social interests and activities of the pupils. This is the point of contact between the individual and the school as a social organization.

Problems common to elementary and high school.

We are often told that education is "preparation for life." Education *is* life. The only preparation for life is life itself; the only way to learn a thing is to live it.

Youth is not primarily interested in preparing for life, but in living. If any form of school organization or activ-

Both related to immediate needs of pupils. ity is to receive a full response, therefore, it must itself represent vital experience, and not relate itself to some remote end.

Applying these generalizations to our problem, we may say, then, that the high school must be organized not primarily for prospective men and women, but for adolescent boys and girls. Just as we found the fundamental principle for the organization of the elementary school in the nature of the child, so we shall find the principle for the organization of the high school in the nature of the adolescent youth.

It is necessary first of all to recognize the fact that the high school presents certain very different problems

Differences between high school and elementary school. from the elementary school. In passing over from the elementary school to the high school, the individual also passes over from childhood to youth. Profound physical changes take place, and these are accompa-

nied by mental changes and modifications of attitude no less deep.

The child of the elementary school, even if found occasionally in overt rebellion against authority, is, on

Adolescent changes in attitude. the whole, under a régime of authority. He takes his standards, beliefs, and attitudes ready made, imitating them from his

elders. He does not pause to question the sanctions for right and wrong; for him right is what he is allowed to do, and wrong what he is forbidden to do. But with adolescence a change comes about; a new consciousness of self arises. The youth finds himself able to think, to judge for himself. He now subjects the standards, be-

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iefs, and attitudes of childhood to examination, and makes them his own in a new sense, or rejects them. His thinking may be illogical and crude, but he thinks. He is no longer a puppet; it is even probable that he becomes very arrogant in the new-found freedom of his thought.

The emotional reconstruction of adolescence is perhaps even more marked than the intellectual. New

Changes in emotional attitudes. emotions arise, not only creating hitherto unknown problems in their own right, but also necessitating a readjustment among the complex of emotions already familiar. The new emotional meaning of the opposite sex begins to define itself, and values undreamt of in childhood assert themselves. Insistent impulses create new problems of control. The fanciful and indistinct ideals of earlier youth begin to crystallize into ambitions and plans. The childish notions concerning desirable vocations are given up and the matter of a desirable occupation seriously considered. Practical considerations begin to control in a new way; activities pursued must not only have a value of their own, but must relate to plans for the future. The youth begins to reach out for the larger estate which he is approaching.

Accompanying these intellectual and emotional changes, the adolescent also undergoes a great change

Change in attitude toward authority. in his attitude toward authority. As a child he expected to obey constituted authority, just because it was authority. He did not question the adaptability of the regulations in the home or the school, but conformed to them when he was required to, or violated them when he found the opportunity. But he did not go so far as to question

the sanctions by which this authority was constituted and put in control over him. He was a child, and children were expected to obey.

The attitude of the adolescent is very different. He feels himself no longer a child, and bitterly resents being treated as one. He feels that he has a right to his own judgment in many matters, and questions by what right others are in authority over him. This attitude often becomes exaggerated to the degree that the adolescent youth is something of an anarchist, and ready to recognize no authority not first fully consented to by himself. It is a notable fact that by far the greater proportion of the boys and girls who run away from home in rebellion, leave during the period of this reconstruction in the attitude toward submission to authority.

One of the mistakes that may be made in the organization of the high school is the failure to recognize the difference between it and the elementary school rendered necessary by the attitude and spirit of adolescence. This is not to say that the whims, the follies, and the arrogance of adolescence are to determine the organization of the high school. It is rather to suggest that there are certain fundamental facts of human nature and development emerging at this time, which must be taken into account if the high school is to relate itself vitally to the lives of its pupils.

The high school must provide for self-control of pupils. The organization of the high school must, therefore, first of all provide for a large measure of self-control over conduct. It is not the province of this discussion to advise whether this be accomplished by means of what is called *student government*, or other-

wise. The movement toward student government has not gone far enough in the high school to prove its wisdom, and probably will not receive wide acceptance. But without this precise form of machinery, the chief motives for control of conduct can be found in the pupils themselves, and be brought to bear on the government of the school. This does not mean that conduct in the high school shall be less controlled than now; it will be better controlled if the organization is properly effected. Adolescent boys and girls have in them the requisite qualities of seriousness and responsiveness to social necessity to control their own conduct for the common good, when once they see the opportunity and the problem. That this is true is being proved in many of our best high schools at the present time.

Not only does the standpoint of school organization that places the chief responsibility for control of conduct on the individual himself tend to eliminate a chief source of strain between teachers and pupils, but it accomplishes an even more important thing: it trains the pupil to subjective standards of conduct and develops a reflective attitude toward ethical problems. School experience is full of situations involving questions of conduct that are typical of questions constantly met in the course of social activities outside the school. If the individual is led to recognize in each of these situations the ethical problem involved, and to assume personal responsibility toward it, a most important bond has been established between the school and social experience.

Any plan of high-school organization is therefore to be condemned that places the responsibility for the

pupil's conduct wholly or chiefly on the teacher. Recitations or examinations must not be so organized and

Personal responsibility to be demanded. conducted as to cause the pupil to feel that there is to be a game of wits played between himself and the constituted authority of the school.

If such is the pupil's interpretation of the situation, he can bluff or cheat, priding himself that he has beaten in the game, and have no qualms of conscience; for it was all a part of the game. The oversight of an assembly room or a class must not be so organized that a premium is placed on sharp conduct, trickery, and evasion. The double standard of morals growing out of just such situations as these constitutes one of the greatest weaknesses of our school system. There is all too general a feeling on the part of the pupils that immoral acts committed in school are of different quality from immoral acts committed outside of school, since school experiences are in some way conceived as divorced from the real experience of society. Such a standpoint makes the school, the chosen instrument of society for socializing the individual, a means of cultivating the habit of shifting moral responsibility and juggling with ethical values.

In co-educational high schools, the social relations of the sexes creates one of the most difficult and insistent

Social relations of the sexes. problems of organization. It is during the high-school age that a complete transformation takes place in the attitude of the

sexes toward each other. The old playfellowship and comradeship of the elementary school has been supplanted by an attitude of shyness and diffidence, which, nevertheless, only masks an irresistible impulsion of each toward the other by a law of nature as old as life itself.

Thoughts of the other sex occupy an amazingly large proportion of the time of adolescent boys and girls. They seek each other's company in a social way. Parties are planned, excursions organized, or social functions projected with a view to being in each other's presence. Now, all this is natural and right, but it has a tendency to run to excess, if not into undesirable or dangerous lines.

Two types of solution have been attempted in dealing with this problem in the school. One is to forbid all

Principles involved. manifestations of interest in the other sex in connection with the activities of the school and to ignore the existence of the social impulse. The other is to recognize the naturalness and inevitability of the impulses leading to these new social relations of the sexes, and provide, through the activities of the school, some means for their expression and guidance. It is hardly necessary to say that the first of these methods does not meet the problem. The great dominating impulses of nature are not to be suppressed by rules and regulations, and they continue to act even if they are ignored or deplored. To take a negative attitude toward the social relations of the pupils is only to divorce the school still further from the problems of social experience.

A recognition of the part to be played by the social impulse in the development of the adolescent will re-

The school as a social centre. quire that the organization of the high school provide for its proper expression.

If the school, as suggested in the preceding section, comes to be the accepted intellectual and social centre for the entire community, it can naturally assume the general direction of social functions of its

pupils arranged under the organization of the school. Various high schools throughout the country have already undertaken this function with excellent promise of success. More or less formal parties, dances, dramatic entertainments, debates, musical entertainments, and athletic contests are among the different social events carried out.

The part of the school in controlling social relations. One of the first advantages from the oversight exercised by the high school over the social relations of its pupils is to provide clean and suitable entertainment for its young people. This is the first step in defending our youth against the insidious evils of the cheap theatre and amusement halls of the cities, and against the hardly less dangerous monotony of the smaller town. A second advantage comes through giving the high school better regulative control over social clubs, fraternities, and sororities which have sprung up within recent years in the high schools. The social organization of the high school must be democratic, and hence cannot permit exclusive organizations to gain a foothold. The remedy here, as already suggested, is primarily to give opportunity for expression of the social impulse in more healthful ways, and to suppress the undesirable by substituting something better than that which is taken away.

Principles of social organization of high school. And so we might go on through the various matters of relationship between the pupils and the high-school organization. But the same principle underlies all the problems. The social organization of the high school, like its intellectual organization in the curriculum, must start from the fundamental nature of adolescence and pro-

ceed toward social efficiency as its aim. Social and ethical judgments later to be demanded must have their prototype in the life of the school. The honesty and fairness required in all social relations outside the school must be demanded and grounded by school problems and situations. The subjective sanctions for conduct necessary to personal freedom must find stimulus and encouragement in the school. In short, the high school in its organization must present, not a section of experience isolated and cut off from the remainder of present or prospective experience, but must itself constitute an integral and vital part of a growing experience that leads without break immediately out into concrete and efficient social participation.

REFERENCES

Brown, *Our National Ideals in Education*; Dutton and Snedden, *Administration of Public Education in the United States*; Gilbert, *The School and Its Life*; Hanus, *A Modern School*; Suzzalo, *The School as a Social Institution*; Tompkins, *School Management*; Young, *Isolation in the School*.

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